# REQUEST FOR QUALIFICATIONS

# **Invasive Vegetation Control**

RFx No. 3140000700

Smart No. 1450-17-R-RFQF-00001



Mississippi Department of Marine Resources 1141 Bayview Avenue Biloxi, Mississippi 39530

Contact: Erin Gallagher – procurement@dmr.ms.gov

#### Introduction

The Mississippi Department of Marine Resources (MDMR) Coastal Preserves Program manages coastal resources for the State of Mississippi through the authority of the Commission on Marine Resources. MDMR is issuing a request for qualifications (RFQ) to establish a contract with an individual, entity, or firm to control non-native, invasive vegetation on 26 Coastal Preserve properties. Control methods may include chemical (herbicide) and/or mechanical techniques that will achieve control of existing infestations. Multiple applications, if necessary, will be allowed within a timeframe of up to two years for treatment. A pre-treatment assessment completed in 2015 identified Chinese tallow and cogongrass as the primary harmful invasive species on most of the parcels. Other targeted invasive species, such as phragmites, vary by site and infestations are detailed on the data sheet for each of the Coastal Preserve properties (Attachment G).

This solicitation is a multi-step RFQ. In Step One, a Statement of Qualifications (SOQ) is submitted and will be evaluated on the basis of qualifications. In Step Two, the respondents determined to be qualified in Step One will then be evaluated further based on their respective price submission, which shall be in the form of a Sealed Pricing Offer (SPO). A contract may be awarded to the individual, entity, or firm, whose SOQ and SPO are determined to be the most advantageous to the MDMR and the State of Mississippi. The factors to be considered in the evaluation of submissions and their relative importance or weight are set forth herein. The scope of work to be performed and the deliverables required under the contract are also set forth herein.

### **Background**

The Mississippi Coastal Preserves Program was created in 1992 to identify, acquire, protect and manage Mississippi coastal wetland habitats in Hancock, Harrison and Jackson Counties. Invasive species control throughout these natural areas can be challenging due to the coastal terrain but is essential to perpetuating native biodiversity and maintaining a healthy coastal economy.

Large-scale habitat disturbance from Hurricane Katrina greatly increased colonization of Chinese tallow (*Triadica sebifera*) and cogongrass (*Imperata cylindrica*) in many Coastal Preserve areas. Common reed (*Phragmites australis*) has greatly increased in area and abundance during recent years, especially on Deer Island.

### **Deadlines/Timeline**

RFQ Issue Date: August 19, 2016

Newspaper Publication Dates: August 19, 2016

August 26, 2016

Deadline for Questions to MDMR: August 30, 2016

10:00 a.m. CST

Posting of Written Answers to Questions: September 1, 2016

4:00 p.m. CST

SOQ and SPO Submission Deadline: September 9, 2016

10:00 p.m. CST

All Deliverables Due: October 1, 2018

### **How to Apply**

Your Statement of Qualifications and Sealed Pricing Officer must be **received** by MDMR no later than **September 9, 2016**, **at 10:00 a.m. CST.** You must personally deliver or mail your sealed SOQ/SPO to Erin Gallagher on the 6<sup>th</sup> floor, 1141 Bayview Avenue, Biloxi, Mississippi 39530. Remember, you are responsible for making sure your SOQ and SPO are received by the deadline. **Submissions received after the deadline will not be considered and will be returned unopened.** Instructions on how to submit your Statement of Qualifications and Sealed Pricing Offer are set forth herein.

### **Scope of Work**

The scope of work for the contract will include, but is not limited to, the following:

1. Develop an invasive species treatment plan for each of the Coastal Preserve properties. The target species list, mapping and quantifying infestations information for each parcel can be found in Attachment G –Treatment Site Data Sheets.

- 2. All treatments shall be performed in accordance with industry standard "Best Management Practices" to maximize effectiveness of treatments while minimizing effects on non-target species.
- 3. The minimum, regardless of the approved method used, requires a reduction of 85% or greater of the existing infestation by target species for each area undergoing treatment.
- 4. The price must include all labor, materials, transportation and other costs necessary to successfully complete the treatment. It is recommended that the respondent visit each site before submitting their SOQ/SPO. Several parcels are only accessible by boat. Failure to visit the site will in no way relieve the successful respondent from furnishing any materials or performing any work required. In accordance with the scope of work and without incurring additional costs to the MDMR, the MDMR reserves the right to prioritize sites for treatment if funding is insufficient to treat all 26 areas.

### **Minimum Qualifications**

The minimum qualifications which the MDMR is seeking for this service include:

- <u>Certifications</u> Respondent must possess and maintain a valid Mississippi Commercial Pesticide Applicator Certificate, and utilize licensed Mississippi Commercial Pesticide Applicators with the appropriate endorsements for the duration of the project. A copy of the Mississippi Commercial Pesticide Applicator Certificate must be submitted with SOQ.
- Experience Evidence of a minimum of three (3) projects of comparable scope, size and complexity to the Scope of Work herein. These projects must have been within the past five (5) years and demonstrate a successful history of invasive plant eradication in the Southeastern United States. Provide project name, location, date, client contact, species targeted, summary of methods used and approximate area of project. (See Attachment F)
- References Two professional references from clients for which the respondent has provided comparable service. References will be graded on a Pass/Fail basis. (See Attachment F)

### **Insurance Requirements**

In order to enter into a contract, you must meet minimum insurance protection requirements. You must provide evidence of your policies within ten (10) calendar days of a fully executed contract.

All insurance policies must be issued by companies licensed or holding a Certificate of Authority from the Mississippi Department of Insurance. All liability insurance policies must provide coverage to the MDMR as an additional insured.

You must hold the following insurance throughout the term of the contract:

Coverage Type	Amount	
Workers' Compensation (as required by Mississippi law)		
Accident (Per Occurrence)	\$100,000	
Disease-Policy Limit	\$500,000	
Disease-Per Employee	\$100,000	
General Liability	I .	
Aggregate	\$1,000,000	
Personal Injury/Bodily	\$500,000	
Injury and Property		
Damage (Per Occurrence)		
Fire Damage (Per Fire)	\$50,000	
Medical Expense (Per	\$5,000	
Person)		

### **Bond Requirements**

You must provide certain bonds within ten (10) calendar days of a fully executed contract. All bonds must be corporate surety bonds issued by a surety company authorized to do business in Mississippi. MDMR must be named as exclusive beneficiary. This project requires the following bonds:

**Performance Bond.** You must provide a performance bond for 100 percent of the bid. The bond helps guarantee timely and complete performance of the project.

**Payment Bond.** You must provide a payment bond for 100 percent of the bid. The bond guarantees payment of all workers and subcontractors working on this project.

### **Selection Process**

This RFQ will utilize a multi-step sealed qualification process. Sealed Pricing Offers (SPOs), which are required to be submitted in a separate sealed envelope at the same time

as submission of the SOQs, will be considered only in the second step and only from those respondents who are determined to be qualified in the first step.

#### Step One

During the first step of the process, each SOQ which was completely and timely submitted will be evaluated by a selection committee appointed by the Executive Director or his designee. The SOQ of any respondent not meeting the minimum qualifications set forth above will be deemed "unacceptable" and the respondent will be so notified in writing by the MDMR. For all the respondents that meet the minimum qualifications set forth above, the Procurement Director and/or staff will call the two (2) professional references and the contact person(s) for the three (3) past projects. (See Attachment F: Reference Score Sheet Example) If the respondent passes the reference check, which will be conducted on a pass/fail basis, the respondent will move on to the scoring committee.

The SOQs of respondents meeting the minimum qualifications set forth above will be scored by the committee using the criteria and the level of importance (weight) associated with each criterion listed below. For each SOQ, the committee will rate each criterion from 0 to 100 and then multiply the score by the weighted percentage for that criterion. The weighted scores for all criteria will be totaled to determine the Step One score for each respondent.

The criteria to be evaluated and the relative weight for each are:

- A record of past performance of similar work, such as capability to perform services within a relevant deadline, control of costs, quality of work and ability to meet schedules and deadlines. (40 points)
- Respondent's ability to provide the required services as reflected/evidenced by qualifications. This includes the ability of the respondent to recommend best practices and to provide a work product that is equal to or exceeds industry standards. (20 points)
- The personnel, equipment, facilities, and financial resources to perform the services currently available or demonstrated to be made available at the time of contracting. (15 points)

Total possible Step One score: 75 points

### Step Two

After the completion of Step One, the Sealed Pricing Offer for each respondent determined to be qualified will be opened by the Procurement Director. The weight for price will be

up to 25 points. Each quoted price will be divided by the lowest quoted price to calculate a ratio. This ratio will be multiplied by the maximum number of pricing points. (25 points) In other words, the respondent with the lowest quoted price will receive a score of 25 points; the remaining respondents' scores will be pro-rated against the lowest price and receive the resulting points.

The Procurement Director will then add the pricing points for each respondent to the respondent's total score from Step One for the total combined score. The highest possible total combined score, including price is 100. The Procurement Director will rank the respondents from highest to lowest based upon each respondent's total combined score. The highest scoring respondent will be selected as the successful respondent, subject to the approval of the MDMR Executive Director.

#### **Term of Contract**

The start date for the contract is the date the contract is signed by the selected respondent and the Executive Director of the MDMR. The end date is two years, or 730 days, from the start date. The contract may be renewed or extended subject to the availability of funds and at the sole discretion of the MDMR with the agreement of the respondent. Any contract renewal or extension must be under the same pricing, terms, and conditions as in the original contract, and shall be agreed to, in writing, by the MDMR and the respondent.

### **Reporting Requirements**

The respondent shall submit monthly progress reports by the 15th of each month. Reports should include a GIS map showing the size and location of the treated area(s), as well as a daily log of herbicide application and/or mechanical control by site and species. All progress reports must be submitted to the Procurement Department at <a href="mailto:Procurement@dmr.ms.gov">Procurement@dmr.ms.gov</a>, attention Erin Gallagher, Procurement Director. Failure to submit reports to the Procurement Department will result in a delay of payment.

### MDMR Contact and Questions/Requests for Clarification

Questions concerning the requirements of this RFQ should be directed to the Procurement Director listed on the cover page of this document. Contact with anyone other than the Procurement Director regarding this RFQ may result in respondent disqualification. All

questions and requests for clarification must be submitted by email to: **Erin Gallagher**, **Procurement Director at** <u>procurement@dmr.ms.gov.</u>

All questions/requests for clarification must be received no later than August 30, 2016 at 10:00 a.m. CST.

All questions/requests for clarification and the answers thereto will be published on the MDMR website (<a href="http://dmr.ms.gov">http://dmr.ms.gov</a>) and the MAGIC Portal at <a href="https://www.ms.gov/dfa/contract\_bid\_search/Bid">https://www.ms.gov/dfa/contract\_bid\_search/Bid</a> for all respondents to view by September 1, 2016 at 4:00 p.m. CST.

The MDMR will not be bound by any verbal or written information that is not specified within this RFQ unless formally noticed and issued by the contact person.

#### **Amendments to this RFQ**

Should an amendment or amendments to this RFQ be issued by MDMR, it will be posted on the MDMR website (<a href="http://www.dmr.ms.gov">http://www.dmr.ms.gov</a>) and on the Mississippi Contract/Procurement Opportunity Search Board (Procurement Portal) website (<a href="https://www.ms.gov/dfa/contract\_bid\_search/Bid">https://www.ms.gov/dfa/contract\_bid\_search/Bid</a>) for all respondents to view. Furthermore, respondents must acknowledge receipt of any amendment to this RFQ by identifying the amendment number and date in the space provided for this purpose on the SOQ Cover Sheet, or by letter. The acknowledgment must be received by the MDMR by the time and at the place specified for receipt of SOQs. It is the respondent's sole responsibility to monitor the website for amendments to the RFQ.

### **How to Submit a SOQ/SPO**

The respondent must submit the SOQ/SPO by paper submission via mail or hand delivery to MDMR as outlined below:

### SOQ/SPO SUBMISSION INSTRUCTIONS

#### **Paper Submission Requirements**

The SOQ and SPO must be sealed separately and must contain the following:

• The SOQ and the SPO must be signed and submitted in separate sealed envelopes. Both sealed envelopes may be placed in a single package or they may be submitted separately. They must be submitted to 1141 Bayview Avenue, Biloxi MS 39530 no later than 10:00 a.m. CST, September 9, 2016.

- Timely submission is the responsibility of the respondent. Submissions received after the specified time will be rejected and returned to the respondent unopened.
- The envelopes and package (if the separate sealed envelopes are placed in a single package) must be marked with the SOQ opening date and time, and the number of the SOQ. E.g. (September 9, 2016, 10:00 a.m. CST; RFx No.3140000700; Smart No. 1450-17-R-RFQF-00001).
- The time and date of receipt will be indicated on the envelope or package by the MDMR staff.
- Submissions via facsimile (faxes) will not be accepted. It is suggested that if a submission is mailed to MDMR, it should be posted in certified mail with a return receipt requested. MDMR will not be responsible for mail delays or lost mail.
- All SOQs and SPOs submitted by hand delivery or mail will become the property
  of the MDMR.
- Sealed Statement of Qualifications should be mailed or hand delivered to and labeled as follows:

#### "INVASIVE VEGITATION CONTROL"

RFx No. 3140000700 Smart No. 1450-17-R-RFQF-00001

Opening Date: 10:00 a.m. CST, September 9, 2016

Mississippi Department of Marine Resources

Procurement Department, 6th Floor

Attention: Erin Gallagher 1141 Bayview Avenue Biloxi MS 39530

**SEALED SOQ – DO NOT OPEN** 

Sealed Pricing Offers should be mailed or hand delivered to and labeled as follows:

#### "INVASIVE VEGITATION CONTROL"

RFx No. 3140000700

Smart No. 1450-17-R-RFQF-00001

Opening Date: 10:00 a.m. CST, September 9, 2016

Mississippi Department of Marine Resources

Attention: Erin Gallagher

> 1141 Bayview Avenue Biloxi MS 39530 **SEALED SPO – DO NOT OPEN**

The <u>deadline</u> for receiving SOQs and SPOs is **September 9, 2016 at 10:00 p.m.** Late submissions will not be accepted and will be return unopened.

### **Requirements for Statement of Qualifications**

All SOQs must include the following:

• **Attachment A – SOQ Cover Sheet**, completed, signed and including requested attachments.

Each page of the SOQ and all attachments must be identified with the name of the respondent. Modifications or additions to any portion of Attachment A may be cause for rejection of the SOQ.

The MDMR reserves the right to select any responsive Statement of Qualifications, pursuant to the evaluation criteria contained herein, to reject all SOQs not meeting minimum requirements, and to exercise its discretion and apply its judgment with respect to any SOQ submitted. The MDMR reserves the right to decide, on a case-by-case basis, whether to reject an SOQ with modifications or additions as nonresponsive. As a precondition to SOQ acceptance, the MDMR may request the respondent to withdraw or modify any portion of the SOQ deemed nonresponsive that does not affect quality, quantity, or delivery of the service. Any respondent claiming that its SOQ contains information exempt from the Mississippi Public Records Act (Miss. Code Ann. § 25-61-1, et seq.), shall segregate and mark the information as confidential and provide the specific statutory authority for the exemption. The respondent must submit all attachments. Requests to review proprietary information will be handled in accordance with the Mississippi Public Records Act.

### **Requirements for Sealed Pricing Offers**

All SPOs must include the following:

• Attachment B – Sealed Pricing Offer, completed and signed.

Modifications or additions to any portion of Attachment B may be cause for rejection of the SPO.

### **Conditions of Solicitation**

The release of this RFQ does not constitute an acceptance of any offer, nor does such release in any way obligate the MDMR to execute a contract with any party. The final decision to execute a contract with any party rests solely with the MDMR.

Before preparing the SOQ/SPO, all respondents should note:

- The MDMR will not be liable for any costs associated with the preparation of the SOQ/SPO;
- The award of a contract pursuant to this RFQ is contingent upon the favorable evaluation of the SOQ/SPO; and,
- Contracted parties will be required to assume full responsibility for all specified services and may not subcontract any part of the services without the express written consent of the MDMR.

### **Notification of Successful Respondent**

Notification will be sent to all respondents by mail and email of the selection of the successful respondent. We will also post the selection of the successful respondent on our website at <a href="https://www.dmr.ms.gov">www.dmr.ms.gov</a>. Work is expected to begin within 15 calendar days of receipt of a fully executed contract.

#### **Protests**

If you are an actual respondent or contractor and feel aggrieved by this RFQ or the outcome, then you may file a protest with the Executive Director of the MDMR. The protest must be in writing and explain the specific reasons that you are protesting. The protest must be filed within three (3) days after you know, or should have known, the facts giving rise to your protest. Late protests will not be considered.

### **Post Award Vendor Debriefing**

Pursuant to PSCRB Rules and Regulations Sections 7-114 through 7-114.07, the vendor may request a post-award debriefing, in writing, by U. S. mail or electronic submission. The request must be made within three (3) business days of notification of the contract award. A debriefing is a meeting and not a hearing. Therefore, legal representation is not required. Should the vendor prefer to have legal representation present, the vendor must notify the MDMR and identify the attorney. The MDMR shall be allowed to schedule and/or suspend and reschedule the debriefing at a time when a representative from the Office of the Mississippi Attorney General's office can be present. For additional information regarding the process and procedure for the Post-Award Vendor Debriefing, please refer to the PSCRB Rules and Regulations that may be found at <a href="https://www.mspb.ms.gov">www.mspb.ms.gov</a>.

### **Governing Law**

This solicitation and any resulting contract shall be governed in all respects by the laws of the State of Mississippi and any litigation with respect thereto shall be brought in the courts of Biloxi, Harrison County, Mississippi.

### **Relationship of Parties**

It is expressly understood and agreed that if MDMR enters into a contract with a respondent, it does so based on the purchase of professional services and not based on an employer-employee relationship or a joint venture relationship. For all purposes under any such contract:

- The awarded respondent shall not be deemed in any way, directly or indirectly, expressly, or by implication, to be an employee of MDMR; and,
- Amounts paid to the awarded respondent under a contract will be paid as a gross sum with no withholdings or deductions being made by MDMR for any purpose.

#### **Contract Administration**

The contract awarded, if any, subsequent to this solicitation shall be administered by the MDMR. All invoices and reports submitted by the awarded respondent for payment of services performed pursuant to the contract shall be submitted as follows:

Erin Gallagher, Procurement Director Mississippi Department of Marine Resources 1141 Bayview Avenue Biloxi, MS 39530

The MDMR will provide timely payment for services in accordance with Section 31-7-305 of the Mississippi Code Annotated, which generally provides for payment by the MDMR within forty-five (45) days of receipt of the invoice.

### **Compensation for Services**

Compensation for services will be in the form of a flat rate. The Contractor understands and agrees that MDMR is exempt from the payment of taxes.

### **Funding Source**

Attached hereto and incorporated by reference as Attachment D is a copy of subcontract conditions required by MDEQ Agreement No. 15-00082 between the Mississippi Department of Environmental Quality (MDEQ) as sub-grantor and the MDMR as subgrantee. Funds from this sub-grant will be used to fund the project under this contract. Independent Contractor acknowledges the requirements in Attachment D and agrees to be bound by same.

Additionally, if a contract is executed as a result of this RFQ, the MDMR and Independent Contractor will execute MDEQ's Request to Subcontract which is attached hereto as Attachment E and incorporated herein by reference.

### **Equal Opportunity Statement**

MDMR will select the respondent for these services without regard to political affiliation, race, color, handicap, genetic information, religion, national origin, sex, religious creed, age, or disability.

#### **Attachments**

The attachments to this RFQ are made a part of this RFQ as if copied herein in words and figures and include:

Attachment A: SOQ Cover Sheet

Attachment B: Sealed Pricing Offer

Attachment C: RFQ and Contract Clauses

Attachment D: Additional Contract Clauses required by MDEQ Sub-Grant No. 15-

00082

Attachment E: MDEQ Request to Subcontract

Attachment F: Reference Score Sheet Example

Attachment G: Treatment Site Data Sheets - Digital files of Preserve areas and individual tracts are available in .KMZ format. Please contact the Mississippi Department of Marine Resources Coastal Preserves Program at (228) 374-5000 for more information.

## **ATTACHMENT A**

## **SOQ Cover Sheet**

Please complete and sign this sheet to include with your SOQ. You may use supplemental pages, if necessary.

Vendor's Name:
Address/Principal Place of Business:
Phone Number:
Fax Number:
Vendor's Email:
If business or firm, Contact Person, Phone Number, and Email:
The place of performance of the proposed contract, if different from the principal place of business identified above:
This is to certify that the respondent submitting this SOQ has been in business
since (date).
Average number of employees over the last three hundred sixty-five (365) days:

### **Prior Projects of Comparable Scope and Complexity:**

Please list **a minimum of three prior projects** of comparable scope, size and complexity completed within the last five (5) years. You must list at least three prior projects, but are encouraged to list more. For **each** project give the project name, location, date, client contact (customer), species targeted, summary of methods used and the approximate size of the area of the project. You may use supplemental sheets to discuss the scope of the prior projects and to list additional projects. You must provide **current contact information** for the client contacts (customers), as MDMR **must be able to contact** the references as soon as possible.

Project #1:		
a.	Project Name:	
b.	Date Completed:	
c.	Species Targeted:	
d.	Summary of Methods Used:	
e.	Location:	
f.	Timeframe for Completion:	
g.	Approximate Size of the Area of the Project:	
h.	Client Contact Name(customer): Telephone: Email: Job Title:	
Project #2:		
a.	Project Name:	
b.	Date Completed:	
c.	Species Targeted:	

d.	Summary of Methods Used:		
e.	Location:		
f.	Timeframe for Completion:		
g.	Approximate Size of the Area of the		
	Project:		
i.	Client Contact Name(customer):		
	Telephone:		
	Email:		
	Job Title:		
Projec			
	a. Project Name:		
	b. Date Completed:		
	c. Species Targeted:		
	d. Summary of Methods Used:		
	e. Location:		
	f. Timeframe for Completion:		
	g. Approximate Size of the Area of the Project:		
j.	Client Contact Name(customer): Telephone: Email: Job Title:		

#### **References:**

In addition to the references (client contacts) listed above, please list at least two additional professional references familiar with the respondent's abilities in the areas involved with this solicitation (you are encouraged but not required to list more than two).

a.	Reference Name:
	i. Telephone:
	ii. Email:
	iii. Job Title:
	iv. Professional Relationship:
	•
b.	Reference Name:
	i. Telephone:
	ii. Email:
	iii. Job Title:
	iv. Professional Relationship:

Please provide current contact information as MDMR must be able to contact these references immediately following the SOQ opening. You may provide more than two references, however, MDMR will only contact two of the references listed. MDMR will call two references from this list as well as the three references (clients) listed above under Prior Project of Comparable Scope and Complexity.

#### **Resumes:**

Please attach a resume listing the education, abilities, qualifications and experience for you and each person who will be assigned to provide the required services. Also include copies of each person's Mississippi Commercial Pesticide Applicators License with the appropriate endorsements.

### Mississippi Commercial Pesticide Applicator Certificate:

Please attach your valid Mississippi Commercial Pesticide Applicator Certificate to your SOQ.

### **Certificate of Good Standing:**

If respondent is a domestic business entity, other than a sole-proprietorship, please attach a Certificate of Good Standing from the Mississippi Secretary of State. All foreign

business entities, other than sole-proprietorships, may be required to register with the Mississippi Secretary of State prior to a contract being executed.

1. **Contingent Fees.** Have you promised compensation to any person to solicit or

By signing below, you certify the following:

		secure this state Contractor contract?  □ Yes □ No
		If you checked yes, please explain:
	2.	<b>Gratuities.</b> You represent that you have not violated, are not violating, and promise not to violate the prohibition against gratuities set forth in Section 6-204 of the <i>Mississippi Personal Service Contract Review Board Rules and Regulations</i> which may be found at <a href="http://www.mspb.ms.gov">http://www.mspb.ms.gov</a> .
3.	tha per Mi	<b>inflicts of Interest.</b> Persons or entities submitting a SOQ in response to this RFQ lest disclose any actual, apparent, direct or indirect, or potential conflicts of interest at may exist with respect to the person or entity, or management or employees of the reson or entity or other persons relative to the firm, with the State of Mississippi, the essissippi Department of Marine Resources and/or its current and former ployees. Please list any know conflicts below:
4.		nendments. You acknowledge all amendments, if any, to this RFQ. Please list endments acknowledged by number and date.
5.	you the	at you have thoroughly read and understand the RFQ and Attachments, and that a agree to all provisions of the RFQ and Attachments including, but not limited to clauses contained in Attachments C and D which will be included in any contract ulting from this RFQ.

Please accept this as my/our Statement of Qualifications pursuant to RFx No.
3140000700/Smart No. 1450-17-R-RFQF-00001 issued by the MDMR on August 19,
2016.

SIGNED BY:	 	 	
TITLE:	 		
DATE:			

## **ATTACHMENT B**

## **Sealed Pricing Offer**

Please complete and sign this sheet and submit in a sealed envelope (separate from your sealed Statement of Qualifications).

sealed	Statement of Qualifications).
MDM	trate price for completion of the scope of work and deliverables contained in R's Request for Qualifications, Invasive Vegetation Control RFx No. 3140000700, No. 1450-17-R-RFQF-00001 is \$
By sig	ning below, you certify the following:
1.	That you have thoroughly read and understand the RFQ and Attachments, and that you agree to all provisions of the RFQ and Attachments including, but not limited to the clauses contained in Attachments C and D which will be included in any contract resulting from this RFQ;
2.	If signing on behalf of a company, that you have authority to bind the company;
3.	That you will perform the services and provide the deliverables required at the flat rate price quoted above;
4.	That, to the best of your knowledge and belief, the flat rate price quoted is based upon cost or pricing data which is accurate, complete, and current as of the submission date;
5.	That you and/or your company are not currently debarred from contracting with the state, any political subdivision of the state, any other state, the federal government, or any political subdivision of the federal government; and,
6.	That the prices submitted in response to this solicitation have been arrived at independently and without, for the purpose of restricting competition, and that you have not communicated with any other vendor or competitor regarding your pricing offer, or the factors you used to calculate the flat rate price.
	e accept this as my/our Sealed Pricing Offer pursuant to RFx No. 000700/Smart No. 1450-17-R-RFQF-00001 issued by the MDMR on <b>August 19</b> ,
SIGNI	ED BY:
TITLE	E:
DATE	

### **ATTACHMENT C**

### **RFQ and Contract Clauses**

This solicitation is governed by the following clauses and any contract entered into pursuant to this Request for Qualifications will contain these clauses, and may contain other clauses. Any reference to "he", "his" or "himself" also includes "she", "her" or "herself."

### **Availability of Funds**

It is expressly understood and agreed that the obligation of the MDMR to proceed under this agreement is conditioned upon the appropriation of funds by the Mississippi State Legislature and the receipt of state and/or federal funds. If the funds anticipated for the continuing fulfillment of the agreement are, at any time, not forthcoming or insufficient, either through the failure of the federal government to provide funds or of the State of Mississippi to appropriate funds or the discontinuance or material alteration of the program under which funds were provided or if funds are not otherwise available to the MDMR, the MDMR shall have the right upon ten (10) working days' notice to Contractor, to terminate this agreement without damage, penalty, cost or expenses to the MDMR of any kind whatsoever. The effective date of termination shall be as specified in the notice of termination.

### **Compliance with Laws**

Contractor understand that the MDMR is an equal opportunity employer and, therefore, maintains a policy which prohibits unlawful discrimination based on race, color, creed, sex, age, national origin, physical handicap, disability, genetic information, or any other consideration made unlawful by federal, state, or local laws. All such discrimination is unlawful and Contractor agrees during the term of the agreement that Contractor will strictly adhere to this policy in his employment practices and provision of services. Contractor shall comply with, and all activities under this agreement shall be subject to, all applicable federal, State of Mississippi, and local laws and regulations, as now existing and as may be amended or modified.

### Certifications

**Representation Regarding Gratuities.** The Contractor represents that he has not violated, is not violating, and promises that he will not violate the prohibition against

gratuities set forth in Section 7-204 (Gratuities) of the Mississippi Personal Service Contract Review Board Rules and Regulations.

**Representation Regarding Contingent Fees.** The Contractor represents that he has not retained a person to solicit or secure a State contract, including this State contract, upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee.

**Environment.** The Contractor must comply with all standards, orders, or regulations issued under the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387).

**Lobbying.** The Contractor certifies that he has not, and will not, use Federal appropriated funds to pay any person or organization to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The Independent Contractor must disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. This clause must be included in any sub-contracts or sub-grants made by the Independent Contractor.

#### The Contractor warrants:

- a) That entry into and performance under this agreement is not restricted or prohibited by any loan, security, financing, contractual, or other agreement of any kind;
- b) Notwithstanding any other provision of this contract to the contrary, that there are no existing legal proceedings or prospective legal proceedings, either voluntary or otherwise, which may adversely affect his ability to perform its obligations under this contract; and,
- c) That he is qualified to perform the scope of services of this contract and is authorized to do business in the State of Mississippi to the extent required by Mississippi law.

### **Confidentiality**

The Contractor must not, either during the service prior or at any time thereafter, directly or indirectly, use or disclose to any person any confidential information provided; however, that nothing in this section precludes the Contractor from disclosing or using Confidential Information if:

- A. The Confidential Information is available to the public or in the public domain at the time of such disclosure or use;
- B. Disclosure of the Confidential Information is required to be made by any law, regulation, governmental authority or court; or,
- C. The Confidential Information was received by the Contractor after termination of the service period from a third party that had a lawful right to disclose it to the Contractor.

Contractor must not disclose or discuss the contents of any personnel file except to MDMR personnel that are authorized to receive and review such information.

#### **Transparency**

This contract, including any accompanying exhibits, attachments, and appendices, is subject to the "Mississippi Public Records Act of 1983," and its exceptions. See Miss. Code Ann. §§ 25-61-1 et seq. (1972, as amended) and Miss. Code Ann. § 79-23-1 (a972, as amended). In addition, this contract is subject to the provisions of the Mississippi Accountability and Transparency Act of 2008, Miss. Code Ann. §§ 27-104-151 et seq. (1972, as amended). Unless exempted from disclosure due to a court-issued protective order, a copy of this executed contract is required to be posted to the Department of Finance and Administration's independent agency contract website for public access at http://www.transparency.mississippi.gov. Information identified by Contractor as trade secrets, or other proprietary information, including confidential vendor information or any other information which is required to be kept confidential by state or federal law or outside the applicable freedom of information statutes, will be redacted. In the event the MDMR receives a public records request for documents containing information identified by the Contractor as trade secrets or proprietary information, the MDMR will notify the Contractor who will be given a reasonable time to obtain a court order protecting the information. See Mississippi Code Annotated § 25-61-9(1).

### **Trade Secrets, Commercial and Financial Information**

It is expressly understood that Mississippi law requires that the provisions of this contract which contain the commodities purchased or the personal or professional services provided, the price to be paid, and the term of the contract shall not be deemed to be a trade secret or confidential commercial or financial information and shall be available for examination, copying, or reproduction.

### **Severability**

Each provision of this contract must be interpreted in a way that is valid under applicable law. If any provision is held invalid, the rest of the Contract will remain in full effect.

### **Changes**

This contract shall not be modified, altered, or changed except by the mutual agreement by an authorized representative of each party to this contract and must be confirmed in writing through the MDMR.

#### **Oral Statements**

No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this agreement. All modifications to this contract must be made in writing by the MDMR.

### **Applicable Law**

This contract shall be governed by and construed in accordance with laws of the State of Mississippi, excluding its conflicts laws provisions, and any litigation with respect thereto shall be brought in the courts of the State. Contractor shall comply with applicable federal, state and local laws and regulations.

### **Procurement Regulations**

The contract shall be governed by the applicable provisions of the *Mississippi Personal Service Contract Review Board Rules and Regulations*, a copy of which is available at 210 Capitol Street, Jackson, Mississippi, for inspection, or downloadable at <a href="https://www.mspb.ms.gov">www.mspb.ms.gov</a>.

### **Acknowledgement**

The Contractor acknowledges that he:

- A. Has had sufficient time to review and consider the contract thoroughly;
- B. Has read and understands the terms and scope of this contract and his obligations hereunder; and,
- C. Has been given an opportunity to obtain independent legal advice, or such other advice as he may desire concerning the interpretation and effect of this contract.

#### **Paymode**

Payments by state agencies using the Statewide accounting system shall be made and remittance information provided electronically as directed by the State. These payments shall be deposited into the bank account of the Contractor's choice. The State may, at its sole discretion, require the Contractor to submit invoices and supporting documentation electronically at any time during the term of this Contract. Contractor understands and agrees that the State is exempt from the payment of taxes. All payments shall be in United States currency.

#### **E-Payment**

Contractor agrees to accept all payments in United States currency via the State of Mississippi's electronic payment and remittance vehicle. The MDMR agrees to make payment in accordance with Mississippi law on "Timely Payments for Purchases by Public Bodies," which generally provides for payment of undisputed amounts by the MDMR within forty-five (45) days of receipt of invoice. Miss. Code Ann. § 31-7-305.

#### **E-Verification**

Contractor represents and warrants that it will ensure its compliance with the Mississippi Employment Protection Act (Miss. Code Ann. § 71-11-1 *et seq.*) and will register and participate in the status verification system for all newly hired employees. The term "employee" as used herein means any person that is hired to perform work within the State of Mississippi. As used herein, "status verification system" means the Illegal Immigration Reform and Immigration Responsibility Act of 1996 that is operated by the United States Department of Homeland Security, also known as the E-Verify Program. Contractor agrees to maintain records of each such compliance and, upon request of the MDMR, to provide a copy of each such verification to the MDMR.

Contractor further represents and warrants that any person assigned to perform services hereunder meets the employment eligibility requirements of all immigration laws. Contractor understands and agrees that any breach of these warranties may subject Contractor to the following: (a) termination of this contract and ineligibility for any state or public contract in Mississippi for up to three (3) years, with notice of such cancellation/termination being made public; (b) the loss of any license, permit, certification or other document granted to Contractor by an agency, department or government entity for the right to do business in Mississippi for up to one (1) year; or, (c) both. In the event of such termination/cancellation, Contractor would also be liable for any additional costs incurred by the MDMR due to contract cancellation or loss of license or permit.

### Stop Work Order

#### **Order to Stop Work**

The MDMR, may, by written order to the Contractor at any time, and without notice to any surety, require the Contractor to stop all work or any part of the work called for by this contract. This order shall be for a specified period not exceeding 90 days after the order is delivered to the Contractor, unless the parties agree to any further period. Any such order shall be identified specifically as a stop work order issued pursuant to this clause.

Upon receipt of such an order, the Contractor shall forthwith comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the work covered by the order during the period of work stoppage. Before the stop work order expires, or within any further period to which the parties shall have agreed, the MDMR shall either:

- (a) cancel the stop work order; or,
- (b) terminate the work covered by such order as provided in the "Termination for Default Clause" or the "Termination for Convenience Clause" of this contract.

#### **Cancellation or Expiration of the Order**

If a stop work order issued under this clause is cancelled at any time during the period specified in the order, or if the period of the order or any extension thereof expires, the Contractor shall have the right to resume work. An appropriate adjustment shall be made in the delivery schedule or Contractor's price, or both, and the contract shall be modified in writing accordingly, if:

- (a) the stop work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and,
- (b) the Contractor asserts a claim for such an adjustment within 30 days after the end of the period of work stoppage; provided that, if the MDMR decides that the facts justify such action, any such claim asserted may be received and acted upon at any time prior to final payment under this contract.

#### **Termination of Stopped Work**

If a stop work order is not cancelled and the work covered by such order is terminated for default or convenience, the reasonable costs resulting from the stop work order shall be allowed by adjustment or otherwise.

#### **Termination for Convenience Clause**

- (1) *Termination*. The Agency Head or designee may, when the interest of the State so require, terminate this contract in whole or in part, for the convenience of the State. The Agency Head or designee shall give written notice of the termination to Contractor specifying the part of the contract terminated and when termination becomes effective.
- (2) Contractor's Obligations. Contractor shall incur no further obligations in connection with the terminated work and on the date set in the notice of termination Contractor will stop work to the extent specified. Contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated work. Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work. The Agency Head or designee may direct Contractor to assign Contractor's right, title, and interest under terminated orders or subcontracts to the State. Contractor must still complete the work not terminated by the notice of termination and may incur obligations as are necessary to do so.

### **Termination for Default Clause**

(1) *Default*. If Contractor refuses or fails to perform any of the provisions of this contract with such diligence as will ensure its completion within the time specified in this contract or any extension thereof, or otherwise fails to timely satisfy the contract provisions, or commits any other substantial breach of this contract, the Agency Head or designee may notify Contractor in writing of the delay or nonperformance and if not cured in ten (10) days or any longer time specified in writing by the Agency Head or designee, such officer may terminate Contractor's right to proceed with the contract or such part of the contract as to which there has been delay or a failure to properly perform. In the event of termination in whole or in part, the Agency Head or designed may procure similar supplies or services in a manner and upon terms deemed appropriate by the Agency Head or designee. Contractor shall continue performance of the contract to the extent it is

- not terminated and shall be liable for excess costs incurred in procuring similar goods or services.
- (2) *Contractor's Duties*. Notwithstanding termination of the contract and subject to any directions from the procurement officer, Contractor shall take timely, reasonable, and necessary action to protect and preserve property in the possession of Contractor in which the State has an interest.
- (3) *Compensation*. Payment for completed services delivered and accepted by the State shall be at the contract price. The State may withhold from amounts due Contractor such sums as the Agency Head or designee deems to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders and to reimburse the State for the excess costs incurred in procuring similar goods and services.
- (4) Excuse for Nonperformance or Delayed Performance. Except with respect to defaults of subcontractors, Contractor shall not be in default by reason of any failure in performance of this contract in accordance with its terms (including any failure by Contractor to make progress in the prosecution of the work hereunder which endangers such performance) if Contractor has notified the Agency Head or designee within 15 days after the cause of the delay and the failure arises out of causes such as: acts of God; acts of the public enemy; acts of the State and any other governmental entity in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. If the failure to perform is caused by the failure of a subcontractor to perform or to make progress, and if such failure arises out of causes similar to those set forth above, Contractor shall not be deemed to be in default, unless the services to be furnished by the subcontractor were reasonably obtainable from other sources in sufficient time to permit Contractor to meet the contract requirements. Upon request of Contractor, the Agency Head or designee shall ascertain the facts and extent of such failure, and. if such officer determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, Contractor's progress and performance would have met the terms of the contract, the delivery schedule shall be revised accordingly, subject to the rights of the State under the clause entitled (in fixed-price contracts, "Termination for Convenience," in cost-reimbursement contracts, "Termination"). (As used in this paragraph of this clause, the term "subcontractor" means subcontractor at any tier.)

- (5) Erroneous Termination for Default. If after notice of termination of Contractor's right to proceed under the provisions of this clause, it is determined for any reason that the contract was not in default under the provisions of this clause, or that the delay was excusable under the provisions of paragraph (4) (Excuse for Nonperformance or Delayed Performance) of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the State, be the same as if the notice of termination had been issued pursuant to such clause.
- (6) Additional Rights and Remedies. The rights and remedies provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

#### **Termination Upon Bankruptcy**

This contract may be terminated in whole or in part by the MDMR upon written notice to Contractor, if Contractor should become the subject of bankruptcy or receivership proceedings, whether voluntary or involuntary, or upon the execution by Contractor of an assignment for the benefit of its creditors. In the event such termination, Contractor shall be entitled to recover just and equitable compensation for satisfactory work performed under this contract, but in no case shall said compensation exceed the total contract price.

#### ADDITIONAL TERMS AND CLAUSES

#### **Attorneys' Fees and Expenses**

Subject to other terms and conditions of this agreement, in the event the Contractor defaults in any obligations under this agreement, the Contractor shall pay to the MDMR all costs and expenses (including, without limitation, investigative fees, court costs, and attorneys' fees) incurred by the MDMR in enforcing this agreement or otherwise reasonably related thereto. Contractor agrees that under no circumstances shall the MDMR be obligated to pay any attorneys' fees or costs of legal action to the Contractor.

#### **Authority to Contract**

The Contractor warrants: (a) that it is a validly organized business with valid authority to enter into this agreement; (b) that it is qualified to do business and in good standing in the State of Mississippi; (c) that entry into and performance under this contract is not restricted or prohibited by any loan, security, financing, contractual, or other agreement of any kind; and (d) notwithstanding any other provision of this contract to the contrary, that there are no existing legal proceeding or prospective legal proceedings, either voluntary or

otherwise, which may adversely affect its ability to perform its obligations under this contract.

#### **Indemnification**

To the fullest extent allowed by law, the Contractor shall indemnify, defend, save and hold harmless, protect, and exonerate the MDMR, its commissioners, board members, officers, employees, agents, and representatives, and the State of Mississippi from and against all claims, demands, liabilities, suits, actions, damages, losses, and costs of every kind and nature whatsoever, including, without limitation, court costs, investigative fees and expenses, and attorney's fees arising out of or caused by the Contractor and/or its partners, principals, agents, employees and/or subcontractors in the performance of or failure to perform this agreement. In the State's sole discretion, the Contractor may be allowed to control the defense of any such claim, suit, etc. In the event the Contractor defends said claim, suit, etc., the Contractor shall use legal counsel acceptable to the State; the Contractor shall be solely responsible for all costs and/or expenses associated with such defense, and the MDMR shall be entitled to participate in said defense. The Contractor shall not settle any claim, suit, etc. without the State's concurrence, which the State shall not unreasonable withhold.

#### **Personnel**

MDMR shall, throughout the life of the contract, have the right of reasonable rejection and approval of staff or subcontractors assigned to the work under the contract by the Contractor. If the MDMR reasonably rejects staff or subcontractor, the Contractor must provide replacement staff or subcontractors satisfactory to the MDMR in a timely manner and at no additional cost to the MDMR. The day-to-day supervision and control of the Contractor's employees and subcontractors is the sole responsibility of the Contractor.

#### **Change in Scope of Work**

The MDMR may order changes in the work under the contract consisting of additions, deletions, or other revisions within the general scope of the contract. No claims may be made by the Contractor that the scope of the project or of the Contractor's services has been changed requiring changes to the amount of compensation to the Contractor or other adjustments to the contract, unless such changes or adjustments have been made by written amendment to the contract signed by the MDMR and the Contractor and approved by the PSCRB, if necessary.

#### **Failure to Enforce**

Failure by the MDMR at any time to enforce the provisions of the contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the contract or any part thereof or the right of the MDMR to enforce any provision at any time in accordance with its terms.

#### **Independent Contractor Status**

The Contractor shall, at all times, be regarded as an independent contractor and shall at no time act as an agent for the MDMR. Nothing contained herein shall be deemed or construed by the MDMR, the Contractor, or any third party as creating the relationship of principal and agent, master and servant, partners, joint ventures, employer and employee, or any similar such relationship between the MDMR and the Contractor. Neither the method of computation of fees or other charges, nor any other provision contained herein, nor any acts of the MDMR or the Contractor hereunder, create or shall be deemed to create a relationship other than the independent relationship of the MDMR and the Contractor. Contractor's personnel shall not be deemed in any way, directly or indirectly, expressly or by implication, to be employees of the MDMR. Neither the Contractor nor its employees shall, under any circumstances, be considered servants, agents or employees of the MDMR; and the MDMR shall be at no time legally responsible for any negligence or other wrongdoing by the Contractor, its servants, agents, or employees. MDMR shall not withhold from the contract payments to the Contractor any federal or state unemployment taxes, federal or state income taxes, Social Security tax, or any other amounts for benefits to the Contractor. Further, the MDMR shall not provide to the Contractor any insurance coverage or other benefits, including Workers' Compensation, normally provided by the State to its employees.

#### **Notices**

All notices required or permitted to be given under this agreement must be is writing and personally delivered or sent by Certified United States mail, postage prepaid, return receipt requested, to the party to whom the notice should be given at the address set forth below. Notice shall be deemed given when actually received or when refused. The parties agree to promptly notify each other in writing of any change of address.

For the Contractor: name, title, address

For the MDMR: Erin Gallagher, Procurement Director

Mississippi Department of Marine Resources

#### 1141 Bayview Avenue

Biloxi MS 39530

#### **Record Retention and Access to Records**

Provided the Contractor is given reasonable advance written notice and such inspection is made during normal business hours of the Contractor, the MDMR or any duly authorized representatives, shall have unimpeded, prompt access to any of the Contractor's books, documents, papers, and/or records which are maintained or produced as a result of the Contract for the purpose of making audits, examination, excerpts, and transcriptions. All records related to this Contract shall be retained by the Contractor for five (5) years after final payment is made under this Contract and all pending matters are closed. However, if any audit, litigation or other action arising out of or related in any way to this Contract is commenced before the end of the five (5) year period, the records shall be retained for one (1) year after all issues arising out of the action are finally resolved or until the end of the five (5) year period, whichever is later.

#### **Recovery of Money**

Whenever, under the contract, any sum of money shall be recoverable from or payable by the Contractor to the MDMR, the same amount may be deducted from any sum due to the Contractor under the contract or under any other contract between the Contractor and the MDMR. The rights of MDMR are in addition and without prejudice to any other right the MDMR may have to claim the amount of any loss or damage suffered by the MDMR on account of the acts or omissions of the Contractor.

#### **Third Party Action Notification**

Contractor shall give the MDMR prompt notice in writing of any action or suit filed, and prompt notice of any claim made against Contractor by any entity that may result in litigation related in any way to this Contract.

#### **Unsatisfactory Work**

If at any time during the contract term, the service performed or work done by the Contractor is considered by the MDMR to create a condition that threatens the health, safety, or welfare of the citizens and/or employees of the State of Mississippi, the Contractor shall, on being notified by the MDMR, immediately correct such deficient service or work. In the event the Contractor fails, after notice, to correct the deficient service or work immediately, the MDMR shall have the right to order the correction of the deficiency by separate contract or with its own resources at the expense of the Contractor.

#### Waiver

No delay or omission by either party to this agreement in exercising any right, power, or remedy hereunder or otherwise afforded by the contract, at law, or in equity shall constitute an acquiescence therein, impair any other right, power or remedy hereunder or otherwise afforded by any means, or operate as a waiver of such right, power, or remedy. No waiver by either party to this agreement shall be valid unless set forth in writing by the party making said waiver. No waiver or modification to any term or condition of this agreement will void, waive, or change any other term or condition. No waiver by one party to this agreement of a default by the other party will imply, be construed as or require waiver of future or other defaults.

#### **Attachment D**

#### Clauses Required by MDEQ Sub-Grant No. 15-00082

All references to SUB-GRANTEE are to the Mississippi Department of Marine Resources.

- 1. The Contracted Party agrees to allow the SUB-GRANTEE, Departments and Agencies of the State of Mississippi, and any of their duly authorized representatives' access to any books, documents, papers, and records of the Contracted Party which are directly pertinent to the Project for the purpose of making audits, examinations, excerpts, and transcriptions.
- 2. The Contracted Party represents that it has, or will secure at its own expense, all personnel required in performing the services under this Agreement. Such personnel shall not be employees of or have any contractual relationship with the SUB-GRANTEE.

All the services required hereunder will be performed by the Contracted Party or under its supervision, and all personnel engaged in the Work shall be fully qualified and shall be authorized or permitted under State and local law to perform such services.

No person who is serving sentence in a penal or correctional institution shall be employed on Work under this Agreement.

- 3. The Contracted Party covenants that he presently has no interest and shall not acquire any interest direct or indirect in the above described Project or any parcels therein or any other interest which would conflict in any manner or degree with the performance of his services hereunder. The Contracted Party further covenants that, in the performance of this Agreement, no person having any such interest shall be employed.
- 4. Salaries of personnel performing Work under this Agreement shall be paid unconditionally and not less often than once a month without payroll deduction or rebate on any account except only such payroll deductions as are mandatory by law or permitted by the applicable regulations issued by the Secretary of Labor pursuant to the "Anti-Kickback Act" of June 13, 1934 (48 Stat. 948; 62 Stat. 740; 63 Stat. 108; Title 18 U.S.C. 874; and Title 40 U.S.C. 276c). The Contracted Party

shall comply with all applicable "Anti-Kickback" regulations and shall insert appropriate provisions in all subcontracts covering Work under this Agreement to insure compliance by the subcontractors with such regulations, and shall be responsible for the submission of affidavits required of subcontractors thereunder except as the Secretary of Labor may specifically provide for variations of or exemptions from the requirements thereof.

5. The Contracted Party agrees to establish safeguards to prohibit employees from using positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have a family, business, or other tie. The Contracted Party will comply with Miss. Code Ann. Section 21-39-1, (1972), which prohibits municipal officers and employees from having or owning any interest or share, individually or as agent or employee of any person or corporation, either directly or indirectly, in any contract made or let by the governing authorities of such municipality for the construction or doing of any public work, or for the sale or purchase of any materials, supplies or property of any description, or for any other purpose whatsoever, or in any subcontract arising therefrom or connected therewith, or to receive, either directly or indirectly, any portion or share of any money or other thing paid for the construction or doing of any public work, or for the sale or purchase of any property, or upon any other contract made by the governing authorities of the municipality, or subcontract arising therefore or connected therewith.

The Contracted Party will also be aware of and avoid any violation of Miss. Code Ann. Section 97-11-19 (Supp. 1982), which prescribes a criminal penalty for any public officer who has an interest in any contract passed by the board of which he is a member during the term he was a member and for one year thereafter.

- 6. Both parties agree to assist and cooperate with the MDEQ or its duly designated representatives in the monitoring of the Project or projects to which this grant relates, and to provide in form and manner approved by MDEQ such monitoring reports, progress reports, and the like as may be required and to provide such reports at the times specified.
- 7. It is the duty of the SUB-GRANTEE and Contracted Party to insure the construction of the Project, including the letting of contracts in connection therewith, shall comply with all applicable laws and regulations and requirements of the United States of America or any agency thereof, the State of Mississippi or any agency thereof, or any local government or political subdivision to the extent that such requirements do not conflict with Federal laws and regulations and any

regulations or policies established by the Commission on Environmental Quality.

- 8. To the extent allowed by State Law, Contracted Party agrees to indemnify and save, release and hold harmless the State of Mississippi, the Commission on Environmental Quality, MDEQ, all of their employees and officers, and the Department's contractors from and against any and all claim, demand, cause of action, liability, loss, damage, injury, suit, judgment, debt and cost, including attorney's fees or expenses on the part of any Contracted Party, their agents or employees or any other parties arising out of or incident to, any and all Work under the terms of this Agreement.
- 9. The SUB-GRANTEE and Contracted Party acknowledge and agree that MDEQ is not a party, in any manner whatsoever, to any contract between the SUB-GRANTEE and the construction contractor(s), engineer(s), attorney(s), equipment supplier(s), subcontractor(s), or between any other parties of any kind whatsoever (hereinafter collectively referred to as "vendor"). The SUB-GRANTEE and Contracted Party also acknowledge and agree that any benefit to vendors contracting with the SUB-GRANTEE or Contracted Parties arising from, or associated with this Agreement is strictly incidental and all such vendors are not, and are not intended to be considered as third party beneficiaries under any agreement between MDEQ and the SUB-GRANTEE.
- 10. Upon execution of any contract between the SUB-GRANTEE and any other party in regard to this project, MDEQ does not assume any authorities, duties, responsibilities, or liabilities under such contract.
- 11. The SUB-GRANTEE shall not have any authority to bind or otherwise obligate MDEQ, directly or indirectly, under any contract or agreement between the SUB-GRANTEE and any other party.
- 12. The SUB-GRANTEE and its vendors acknowledge and agree that any action taken by MDEQ in its role of grantor, or in its separate and distinct role as regulator shall not in any way change or alter its position as that of grantor.
- 13. MDEQ does not have any authority, duty, responsibility, or liability in contract claims or dispute identification, negotiation, resolution, or any other actions regarding contract claims under the contract(s) between the SUB-GRANTEE and any other party.

Department of Marine Resources RFQ –Invasive Vegetation Control Issued – August 19, 2016

14. The SUB-GRANTEE and the Contracted Party acknowledge and agree that MDEQ is not obligated to review, comment on, approve, or discuss the merits of any contract claims presented by or to any party. Any MDEQ reviews, approvals, observations, presence at meetings, written communications, verbal communications or other actions are not to be interpreted as addressing the merits of any claims, nor are they to be construed as interpreting the contract between the SUB~GRANTEE and the Contracted Party or any other parties.

# **Attachment E**

# MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY REQUEST TO SUBCONTRACT

MDEQ Agreement Number 15-00082

In accordance with Article 15, Anti-Assignment/Subcontra Agreement, Mississippi Department of Marine Resources of following portion or duties under the Agreement to	requests approval to subcontract the
Define task(s)/work to be subcontracted: Control non-native, invasive vegetation on 26 Coastal Preschemical (herbicide) and/or mechanical techniques that wi applications, if necessary, within a treatment timeframe of	ll achieve control of existing infestations using multiple
Subcontractor FEIN/Tax ID:	
SUB-GRANTEE	Subcontractor:
Mississippi Department of Marine Resources	
Authorized Signature of SUB-GRANTEE  Jamie M. Miller, Executive Director	Authorized Signature of Subcontractor
Printed Name/Title	Printed Name/Title
Approved By:	
Mississippi Department of Environmental Quality Gary C. Rikard Executive Director	
Debarment List	
For Contracts Office Use Only	

## **Attachment F**

# **Invasive Vegetation Control**

RFx No. 3140000700

Smart No. 1450-17-R-RFQF-00001

# **Reference Score Sheet**

TO BE COMPLETED BY MDMR STAFF ONLY

Respondent Name:		-	
Reference Name:			
Person Spoken To:			
Score:			
Was the Respondent easy to work with in the scheduling and provision of the services rendered?	Yes	No	
Were you satisfied with the services provided? If no, please explain.	Yes	No	
Was the Respondent responsive to your needs?	Yes	No	
Would you recommend the Respondent to others for future projects?	Yes	No	
Each "yes" is one point; each "no" is zero points. Respondent must have two professional references and three past projects to be considered respondent by the scoring committee.			
Called By:			
Signature:			
Title:			
Date and Time:			
Notes:			

#### ATTACHMENT G

Mississippi Department of Marine Resources - Coastal Preserves **Program Invasive Species Treatment Program - Site Datasheet** 





#### Legend Hancock County Coastal Preserve Wachovia Tract

Wachovia

Site No: 1 Site Name: Hancock County Marsh Preserves - Wachovia

County: Hancock Lat: 30.2925441 Long: 89.6260791

Total Area: 1,203 acres.

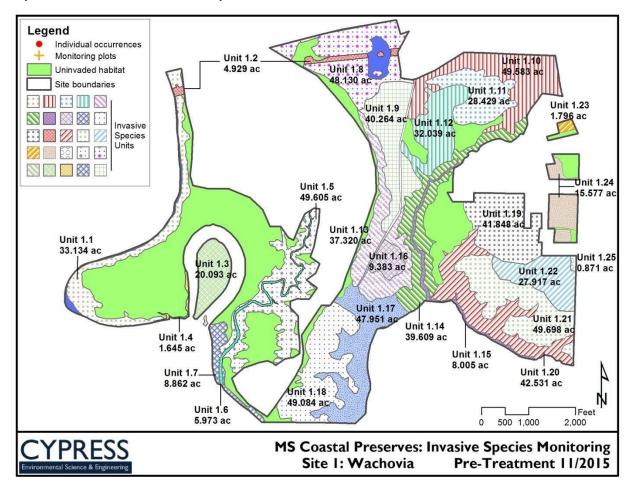
Access Info: Boat access via Pearl River. Unpaved launch at Logtown (<.1 mile). Paved launch at Pearlington (about six miles downstream). Land access via un-named road and trail at Infinity Science Center.

Targeted Invasive Species: Chinese tallow (Triadeca sebifera), Chinese privet (Liqustrum sinense), rattlebox (Sesbania punicea), tung tree (Vernicia fordii)

**Site Description:** This site is located on a west-to-east gradient from the Pearl River across to inland pine forests. Habitats include water (tidal creeks), marsh, swamp, mixed riverine forest, mixed bottomland forest and pine forest (mostly plantation loblolly and some restored longleaf).

**T&E Species Considerations:** Unknown

#### Map of Site Location and Invasive Species Units



Unit 1.1 – 33.134 acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-258	43	3.5-6.5	0-1	0-<1%	
Triadica sebifera	0	0	-	1-2	NA	

Triadica sebifera	0-103	17	18-20	2-3	NA
Triadica sebifera	0-309	52	25-40	3-5	NA
Triadica sebifera	0-206	34	35-40	5-8	NA
Triadica sebifera	0-52	9	40	8-12	NA
Triadica sebifera	0	0	-	>12	NA
Sesbania punicea	0-155	43	6-8	0-0.5	0
Sesbania punicea	0-103	26	5-9	0.5-1	NA

Unit 1.7 – 8.862 acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-567	155	3-20	0-1	0-<1%
Triadica sebifera	0-103	26	12	1-2	NA
Triadica sebifera	0	0	0	2-3	NA
Triadica sebifera	0-52	13	20	3-5	NA
Triadica sebifera	0-103	26	28	5-8	NA
Triadica sebifera	0-52	13	35	8-12	NA
Triadica sebifera	0	0	-	>12	NA
Sesbania punicea	0-258	103	6-7	0-0.5	0%
Sesbania punicea	0-464	116	8-9	0.5-1	NA
Sesbania punicea	0-412	116	8-12	1-2	NA

Unit 1.8 – 48.130	Unit 1.8 – 48.130 acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0	0	-	0-1	0-<1%	
Triadica sebifera	0	0	-	1-2	NA	
Triadica sebifera	0	0	-	2-3	NA	
Triadica sebifera	0	0	-	3-5	NA	
Triadica sebifera	0	0	-	5-8	NA	
Triadica sebifera	0-52	9	45	8-12	NA	
Triadica sebifera	0	0	-	>12	NA	
Vernicia fordii	0-309	60	4-5	0-1	0-8%	
Vernicia fordii	0-155	26	10-15	1-2	NA	

Vernicia fordii	0-52	9	10	2-3	NA
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Unit 1.9 – 40.264 acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-1031	161	4-15	0-1	0-<1%
Triadica sebifera	0-670	135	12-20	1-2	NA
Triadica sebifera	0-258	90	15-25	2-3	NA
Triadica sebifera	0	0	-	3-5	NA
Triadica sebifera	0-52	7	25	5-8	NA
Triadica sebifera	0	0	-	8-12	NA
Triadica sebifera	0	0	-	>12	NA

Unit 1.10 – 49.583 acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-1031	161	4-15	0-1	0-<1%
Triadica sebifera	0-670	135	12-20	1-2	NA
Triadica sebifera	0-258	90	15-25	2-3	NA
Triadica sebifera	0	0	-	3-5	NA
Triadica sebifera	0-52	7	25	5-8	NA
Triadica sebifera	0	0	-	8-12	NA
Triadica sebifera	0	0	-	>12	NA

Unit 1.11 -28.429 acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-52	17	7-8	0-1	0%	
Triadica sebifera	0-52	9	14	1-2	NA	
Triadica sebifera	0	0	-	2-3	NA	
Triadica sebifera	0	0	-	3-5	NA	
Triadica sebifera	0	0	-	5-8	NA	
Triadica sebifera	0	0	-	8-12	NA	
Triadica sebifera	0	0	-	>12	NA	

Unit 1.12 – 32.039 acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-103	43	7-9	0-1	0-1%	
Triadica sebifera	0-412	77	18-25	1-2	NA	
Triadica sebifera	0-154	34	17-23	2-3	NA	
Triadica sebifera	0-52	9	23	3-5	NA	
Triadica sebifera	0	0	-	5-8	NA	
Triadica sebifera	0	0	-	8-12	NA	
Triadica sebifera	0	0	-	>12	NA	

Unit 1.13 – 37.320 acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-52	7	12	0-1	0-<1%
Triadica sebifera	0	0	-	1-2	NA
Triadica sebifera	0-52	7	22	2-3	NA
Triadica sebifera	0-155	26	15-30	3-5	NA
Triadica sebifera	0	0	-	5-8	NA
Triadica sebifera	0	0	-	8-12	NA
Triadica sebifera	0	0	-	>12	NA

Unit 1.14 – 39.609 acres								
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0	0	-	0-1	0%			
Triadica sebifera	0	0	-	1-2	NA			
Triadica sebifera	0	0	-	2-3	NA			
Triadica sebifera	0-52	9	25	3-5	NA			

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Triadica sebifera	0	0	-	5-8	NA
Triadica sebifera	0	0	-	8-12	NA
Triadica sebifera	0	0	-	>12	NA

Unit 1.16 – 9.383 acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0	0	-	0-1	0%		
Triadica sebifera	0	0	-	1-2	NA		
Triadica sebifera	0	0	-	2-3	NA		
Triadica sebifera	0-52	13	25	3-5	NA		
Triadica sebifera	0	0	-	5-8	NA		
Triadica sebifera	0	0	-	8-12	NA		
Triadica sebifera	0	0	-	>12	NA		

Unit 1.18 – 49.084 acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-6289	779	4.5-12	0-1	0-2%		
Triadica sebifera	0-2165	241	12-17	1-2	NA		
Triadica sebifera	0-464	63	12-20	2-3	NA		
Triadica sebifera	0-52	6	15	3-5	NA		
Triadica sebifera	0	0	-	5-8	NA		
Triadica sebifera	0	0	-	8-12	NA		
Triadica sebifera	0	0	-	>12	NA		
Ligustrum sinense	0-2784	315	4-8	0-0.5	0-3%		
Ligustrum sinense	0-722	80	10-12	0.5-1	NA		
Ligustrum sinense	0-464	25	12-15	1- 2	NA		

Unit 1.19 – 41.848 acres								
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0-155	26	4-5	0-1	0-1%			
Triadica sebifera	0	0	-	1-2	NA			
Triadica sebifera	0-155	26	22	2-3	NA			
Triadica sebifera	0	0	-	3-5	NA			
Triadica sebifera	0	0	-	5-8	NA			
Triadica sebifera	0	0	-	8-12	NA			
Triadica sebifera	0	0	-	>12	NA			

Unit 1.21 – 49.698 acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-52	9	12	0-1	0-<1%		
Triadica sebifera	0-52	9	18	1-2	NA		
Triadica sebifera	0-52	9	10	2-3	NA		
Triadica sebifera	0-52	9	15	3-5	NA		
Triadica sebifera	0-103	17	28-35	5-8	NA		
Triadica sebifera	0-103	17	45	8-12	NA		
Triadica sebifera	0	0	-	>12	NA		

Unit 1.22 – 27.917 acres								
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0	0	-	0-1	0%			
Triadica sebifera	0	0	-	1-2	NA			
Triadica sebifera	0	0	-	2-3	NA			
Triadica sebifera	0	0	-	3-5	NA			
Triadica sebifera	0-103	14	45-50	5-8	NA			

Triadica sebifera	0-52	9	50	8-12	NA
Triadica sebifera	0	0	-	>12	NA

Unit 1.23 – 1.796 acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-103	52	6-8	0-1	0-<1%		
Triadica sebifera	0-155	78	10-12	1-2	NA		
Triadica sebifera	0	0	-	2-3	NA		
Triadica sebifera	0	0	-	3-5	NA		
Triadica sebifera	0	0	-	5-8	NA		
Triadica sebifera	0	0	-	8-12	NA		
Triadica sebifera	0	0	-	>12	NA		

Unit 1.24 – 15.577 acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-52	13	5-12	0-1	0%		
Triadica sebifera	0	0	-	1-2	NA		
Triadica sebifera	0	0	-	2-3	NA		
Triadica sebifera	0	0	-	3-5	NA		
Triadica sebifera	0	0	-	5-8	NA		
Triadica sebifera	0-52	7	35	8-12	NA		
Triadica sebifera	0	0	-	>12	NA		

Unit 1.25 – 0.871 acres								
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0	0	-	0-1	0%			
Triadica sebifera	0-52	26	16	1-2	NA			
Triadica sebifera	0-103	52	15-16	2-3	NA			
Triadica sebifera	0-103	52	20-23	3-5	NA			

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Triadica sebifera	0-52	26	25	5-8	NA
Triadica sebifera	0	0	-	8-12	NA
Triadica sebifera	0	0	-	>12	NA

# Mississippi Department of Marine Resources - Coastal Preserves Program Invasive Species Treatment Project - Site Datasheet



Site No: 2 Site Name: Hancock County Marsh Preserve - Nugent

County: Hancock Lat: 30.2686728 Long: 89.6089893

Total Area: 125.7 acres

**Access Info:** Water access via Parker Bayou (2.2 Miles from Pearlington launch or 1.8 miles from unpaved launch at Logtown).

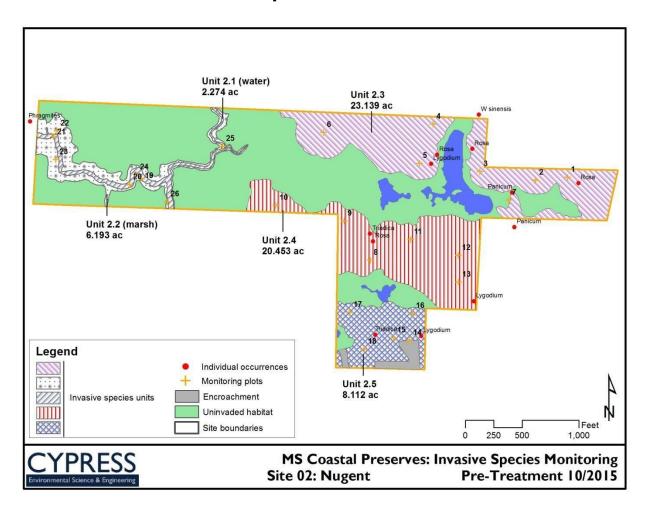
**Targeted Species:** Chinese tallow (*Triadeca sebifera*)

**Site Description:** Mixed forest, estuarine marsh and bayou habitats.

**T&E Species Considerations:** Unknown

**Summary of Control Efforts to Date:** No known control efforts to date.

## **Map of Site Location and Invasive Species Units**



Unit 2.3 – 23.139 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	

Triadica sebifera	0-52	7	7	0-1	0-<1%
Triadica sebifera	0-103	37	8-20	1-2	NA
Triadica sebifera	0-103	37	22-25	2-3	NA
Triadica sebifera	0-103	59	25-35	3-5	NA
Triadica sebifera	0-52	15	35-40	5-8	NA
Triadica sebifera	0	0	NA	8-12	NA
Triadica sebifera	0	0	NA	>12	NA

Unit 2.4 – 20.453 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-825	249	4-16	0-1	0-5%		
Triadica sebifera	0-464	155	10-20	1-2	NA		
Triadica sebifera	0-155	78	12-25	2-3	NA		
Triadica sebifera	0-155	52	16-25	3-5	NA		
Triadica sebifera	0-52	9	20	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		
Triadica sebifera	0	0	NA	>12	NA		

Unit 2.5 – 8.112 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-206	93	4-12	0-1	0-1%		
Triadica sebifera	0-258	124	10-20	1-2	NA		
Triadica sebifera	0-206	41	20-25	2-3	NA		
Triadica sebifera	0-103	31	18-25	3-5	NA		
Triadica sebifera	0-52	10	25	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		
Triadica sebifera	0	0	NA	>12	NA		





Hancock County Marsh Coastal Preserve ReynoldsTract

Legend Reynolds

Site No: 3 | Site Name: Hancock County Marsh Preserve - Reynolds

**County:** Hancock Lat: 30.2074782 Long: 89.5102886

Total Area: 10.2 Acres

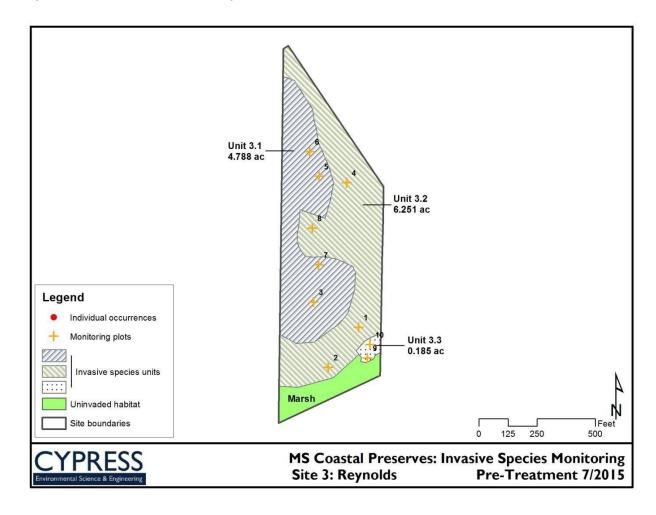
Access Info: Road access via Tarpon Road.

Target Species: Chinese tallow (*Triadeca sebifera*), Rattlebox (*Sesbania punicea*), Phragmities

(Phragmites australis)

**Site Description:** The western side of the property is a forested ridge grading into a high marsh/scrub shrub habitat. A small area of estuarine marsh is present near the southern boundary of the site.

### **Map of Site Location and Invasive Species Units**



Unit 3.1 – 4.788 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	567-8609	3106	4-12	0-1	0-1%		
Triadica sebifera	52-567	348	10-15	1-2	NA		
Triadica sebifera	0-309	155	12-15	2-3	NA		
Triadica sebifera	0-206	52	15-30	3-5	NA		

Unit 3.2 – 6.251 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	1650-2938	1972	6-15	0-2	0-4%		
Triadica sebifera	52-258	168	7-15	2-3	NA		
Triadica sebifera	0-206	52	14-18	3-5	NA		
Sesbania punicea	0-52	13	6.5	0-0.5	NA		

Unit 3.3 – 0.185 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	1650-2938	1972	6-15	0-2	0-4%		
Triadica sebifera	52-258	168	7-15	2-3	NA		
Triadica sebifera	0-206	52	14-18	3-5	NA		
Sesbania punicea	0-52	13	6.5	0-0.5	NA		

Unit 3.3 continued						
Species	Height (ft)	% Cover Range	% Cover Mean			
Phragmites australis	9	85-90	88			





# Hancock County Marsh Coastal Preserve PipelineTract

Legend Pipeline

0.5 Miles

Site No: 4 Site Name: Hancock County Marsh Preserve - Pipeline

**County:** Hancock Lat: 30.2070725 Long: 89.4965318

Total Area: 16 Acres

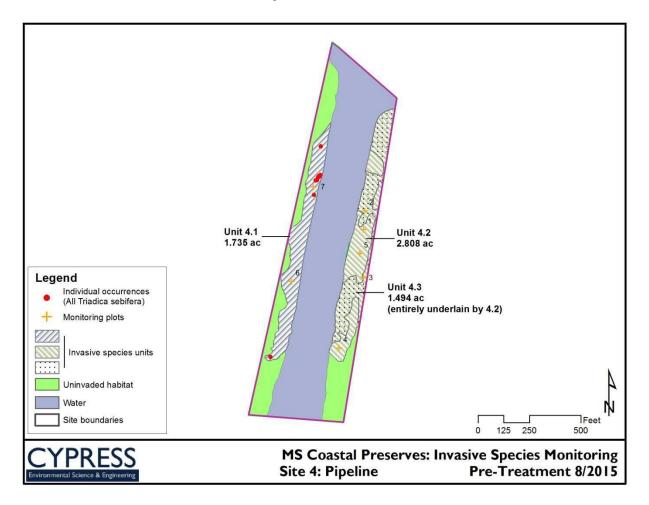
Access Info: Boat access via LaFrance marina (< .25 miles) or Bayou Caddy (about 7 miles)

**Targeted Species:** Chinese tallow (*Triadeca sebifera*), cogongrass (*Imperata cylindrica*)

**Site Description:** Dredge spoil berms with mixed-density maritime forest/scrub complex grading into estuarine marsh split by a navigational canal.

**T&E Species Considerations:** Unknown

# **Map of Site Location and Invasive Species Units**



Unit 4.1 – 1.735 Acres					
Species	Height (ft)	% Cover Range	Mean % Cover		
Imperata cylindrica	1.5-2.5'	75-100%	87.5%		

Unit 4.2 – 2.808 Acres					
Species	Height (ft)	% Cover Range	Mean % Cover		
Imperata cylindrica	2.5-3	99-100%	99.5%		

Unit 4.3 – 1.494 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-412	206	8-10	0-1	NA	

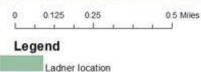
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Triadica sebifera	0-773	387	10-12	1-2	NA
Triadica sebifera	0-258	129	12-20	2-3	NA
Triadica sebifera	0-206	103	12-20	3-5	NA





Hancock County Marshes Coastal Preserve Ladner Unit



Site No: 5 Site Name: Hancock County Marshes Coastal Preserve – Ladner Unit

**County:** Hancock Lat: 30.2206675 Long: 89.8421592

Total Area: 203.6 acres

Access Info: Paved road access via Ansley Road and Gulf Ave.

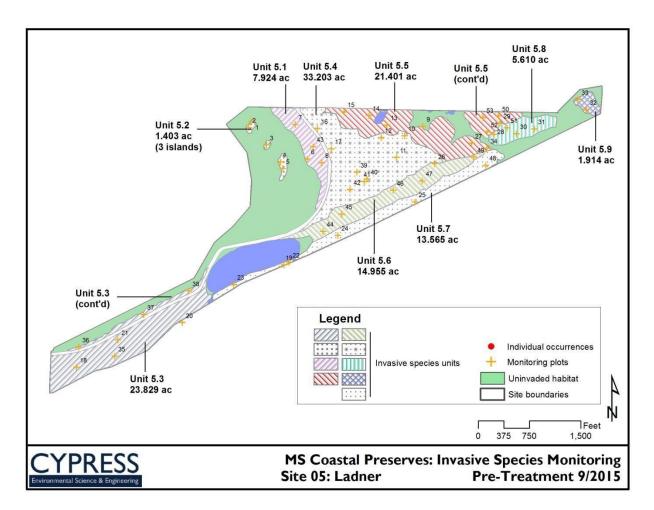
Varied terrain. Use of small ATV might be possible in upland areas. Dense vegetation in wooded area North of Ansley Road, foot access difficult. Many fallen trees in area South of Gulf Ave.

Targeted Species: Chinese tallow (Triadeca sebifera), Common reed (Phragmites australis).

**Habitat Types:** Chenier forest, pine-dominated forest, scrub/shrub community and a high marsh community.

**T&E Species Considerations:** Unknown

#### Map of Site Location and Invasive Species Units



Unit 5.1 – 7.726 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	103-1083	503	3.5-12	0-1	0-5%		
Triadica sebifera	0-155	52	8-12	1-2	NA		
Triadica sebifera	0	0	NA	2-3	NA		
Triadica sebifera	0	0	NA	3-5	NA		
Triadica sebifera	0	0	NA	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		

Unit 5.2 – 1.403 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	52-825	374	3.5-12	0-1	0-15%		
Triadica sebifera	0-464	196	7-16	1-2	NA		
Triadica sebifera	0-206	72	10-15	2-3	NA		
Triadica sebifera	52-516	196	10-27	3-5	NA		
Triadica sebifera	52-206	103	15-27	5-8	NA		
Triadica sebifera	0-52	31	23-30	8-12	NA		

Unit 5.3 – 23.852 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-9279	2180	3.5-18	0-1	1-5%	
Triadica sebifera	0-464	125	7-18	1-2	NA	
Triadica sebifera	0	0	NA	2-3	NA	
Triadica sebifera	0-155	22	18-24	3-5	NA	
Triadica sebifera	0-52	7	27-27	5-8	NA	
Triadica sebifera	0	0	NA	8-12	NA	

Unit 5.4 – 33.203 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-412	92	4-10	0-1	0-3%		
Triadica sebifera	0-412	126	7-15	1-2	NA		
Triadica sebifera	0-258	52	14-21	2-3	NA		
Triadica sebifera	0-103	17	17-22	3-5	NA		
Triadica sebifera	0	0	NA	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		

Unit 5.4 - continued						
Species	Height (ft)	% Cover Range	% Mean Cover			
Phragmites australis	8-15	0-100%	16%			

Unit 5.5 – 21.401 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-2062	441	3.5-12	0-1	0-1%		
Triadica sebifera	0-309	143	8-20	1-2	NA		
Triadica sebifera	0-206	57	12-23	2-3	NA		
Triadica sebifera	0-52	6	22	3-5	NA		
Triadica sebifera	0-52	6	18-22	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		

Unit 5.6 – 14.955 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	361-1392	636	4-12	0-1	0-1%		
Triadica sebifera	0-619	163	12-22	1-2	NA		
Triadica sebifera	0-258	43	15-24	2-3	NA		
Triadica sebifera	0-103	17	25	3-5	NA		
Triadica sebifera	0	0	NA	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		

Unit 5.7 – 13.565 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-52	9	4	0-1	0%	
Triadica sebifera	0	0	NA	1-2	NA	
Triadica sebifera	0	0	NA	2-3	NA	
Triadica sebifera	0	0	NA	3-5	NA	
Triadica sebifera	0	0	NA	5-8	NA	
Triadica sebifera	0	0	NA	8-12	NA	

Unit 5.8 – 5.610 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-464	194	3.5-12	0-1	0-2%		
Triadica sebifera	0-52	26	12-13	1-2	NA		
Triadica sebifera	0	0	NA	2-3	NA		
Triadica sebifera	0	0	NA	3-5	NA		
Triadica sebifera	0	0	NA	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		

Unit 5.9 – 1.914 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	52-258	155	4-12	0-1	0-<1%		
Triadica sebifera	0	0	NA	1-2	NA		





## Hancock County Marsh Coastal Preserve Beckendorf Tract

Legend

Beckendorf

0.9 Miles

Site No: 6 | Site Name: Beckendorf

**County:** Hancock Lat: 30.2330777 Long: 89.4494194

Total Area: 202.3 Acres

**Access Info:** Boat access via Bryan Bayou, 1.6 miles from Bayou Caddy Boat Launch. Trail largely overgrown. Foot access difficult in many places. Some wet/muddy areas. Possibility of land access on Western end of trail if adjacent landowner can be contacted and permission to cross railroad tracks obtained.

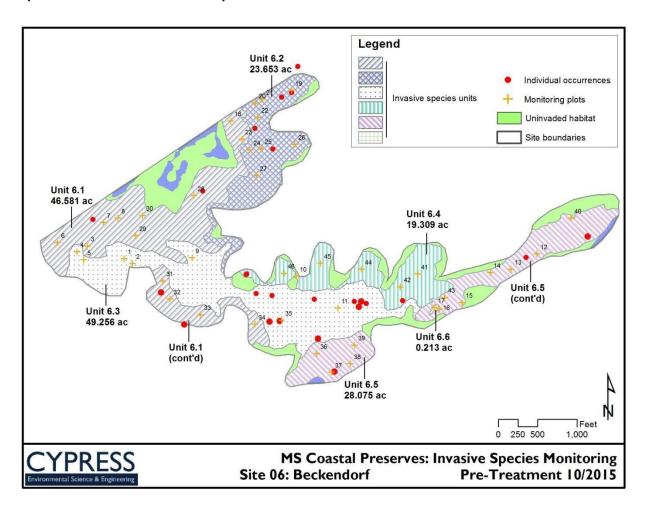
**Targeted Species:** Chinese Tallow (*Triadeca sebifera*) and Cogon grass (*Imperata cylindrica*)

**Site Description:** Chenier forest, a pine forest, a scrub/shrub community, and a high marsh community. Feral hogs numerous on site.

### **T&E Species Considerations:** Unknown

Summary of Control Efforts to Date: Aerial Clearcast™ treatment for Chinese tallow (Sept 2010). Treatment was very effective at killing existing trees. Currently there is significant regrowth from seed bank.

#### **Map of Site Location and Invasive Species Units**



Unit 6.1 – 46.581 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-3644	704	3.5-12	0-1	0-<1%		
Triadica sebifera	0-1822	184	8-20	1-2	NA		
Triadica sebifera	0-1012	82	15-20	2-3	NA		
Triadica sebifera	0-405	67	12-30	3-5	NA		
Triadica sebifera	0-202	35	25-35	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		
Triadica sebifera	0	0	NA	>12	NA		

Unit 6.2 - 23.653 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-1031	206	3.5-12	0-1	0-5%		
Triadica sebifera	0-103	26	8-14	1-2	NA		
Triadica sebifera	0-103	19	8-14	2-3	NA		
Triadica sebifera	0-52	7	15	3-5	NA		
Triadica sebifera	0-52	7	20	5-8	NA		
Triadica sebifera	0	0	NA	8-12	NA		
Triadica sebifera	0	0	NA	>12	NA		

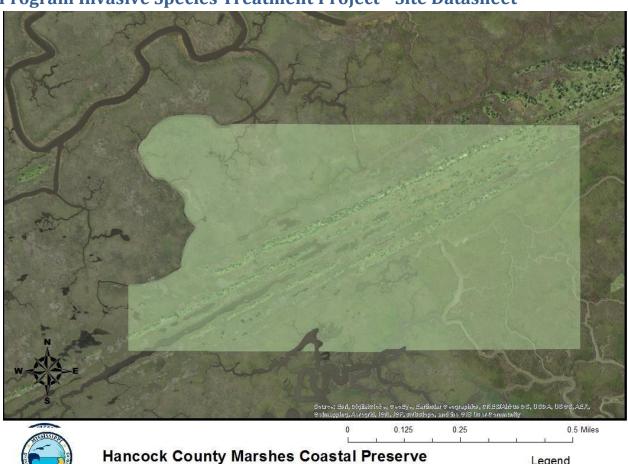
Unit 6.3 – 49.256 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-3093	663	3.5-12	0-1	1-3%	
Triadica sebifera	0-52	7	12-13	1-2	NA	
Triadica sebifera	0	0	NA	2-3	NA	
Triadica sebifera	0-103	15	20-22	3-5	NA	
Triadica sebifera	0-103	15	30	5-8	NA	

Triadica sebifera	0	0	NA	8-12	NA
Triadica sebifera	0	0	NA	>12	NA
Unit 6.4 – 19.309 Acı	res				
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-15517	2767	3.5-8	0-1	0-5%
Triadica sebifera	0-464	103	8-12	1-2	NA
Triadica sebifera	0-103	17	18	2-3	NA
Triadica sebifera	0-258	52	12-30	3-5	NA
Triadica sebifera	0-155	26	NA	5-8	NA
Triadica sebifera	0	0	NA	8-12	NA
Triadica sebifera	0	0	NA	>12	NA

Unit 6.5 – 28.075 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-3969	485	3.5-10	0-1	0-6%	
Triadica sebifera	0-361	46	8-12	1-2	NA	
Triadica sebifera	0-155	31	8-12	2-3	NA	
Triadica sebifera	0	0	NA	3-5	NA	
Triadica sebifera	0-52	5	13	5-8	NA	
Triadica sebifera	0	0	NA	8-12	NA	
Triadica sebifera	0	0	NA	>12	NA	

Unit 6.6 - 0.213 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-773	387	3.5-12	0-1	0-1%	
Triadica sebifera	0-155	78	10-12	1-2	NA	
Triadica sebifera	0-52	26	17	2-3	NA	
Triadica sebifera	0	0	NA	3-5	NA	
Triadica sebifera	0	0	NA	5-8	NA	
Triadica sebifera	0	0	NA	8-12	NA	
Triadica sebifera	0	0	NA	>12	NA	

Unit 6.6 - continued					
Species	Height (ft)	% Cover Range	Mean % Cover		
Imperata cylindrica	0-3	95-98%	97%		



Legend

Olemiss

Site No: 7 Site Name: Hancock County Marsh Preserve – Ole Miss

County: Hancock Lat: 30.2209413 Long: 89.4511016

**Ole Miss Tract** 

Total Area: 86 Acres

Access Info: Boat access via Bayou Caddy launch (1.2 miles). Shallow water access on Campbell

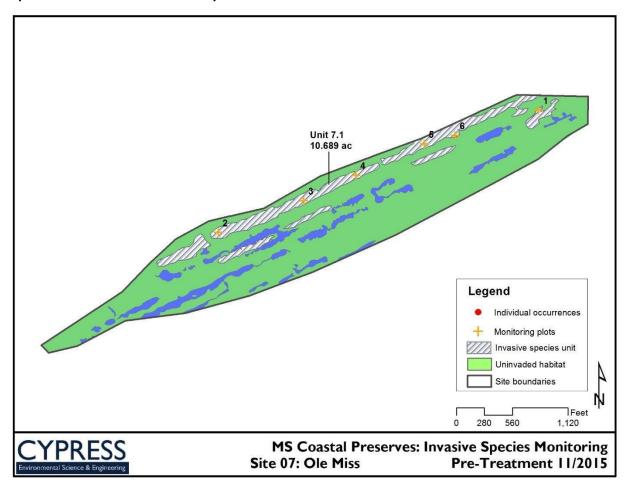
Inside Bayou (3.7 miles)

**Targeted Species:** Chinese tallow (*Triadica sebifera*)

**Site Description:** Chenier plain complex of sandy ridges inset in high marsh dotted with hammocks of scrub/shrub. Numerous feral hogs on entire site.

**T&E Species Considerations:** Unknown

#### **Map of Site Location and Invasive Species Units**



Unit 7.1 – 10.689 Acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-52	8.7	15	2-3	0%





### Hancock County Marsh Coastal Preserve Joyner Tract

Legend

Joyner\_Parcel

Site No: 8 | Site Name: Hancock County Marsh Preserve - Joyner

**County:** Hancock Lat: 30.2515410 Long: 89.4472032

Total Area: 43.5 Acres

**Access Info:** Possible access via Sportsman's Lake levee and Oak St crossing privately-owned land.

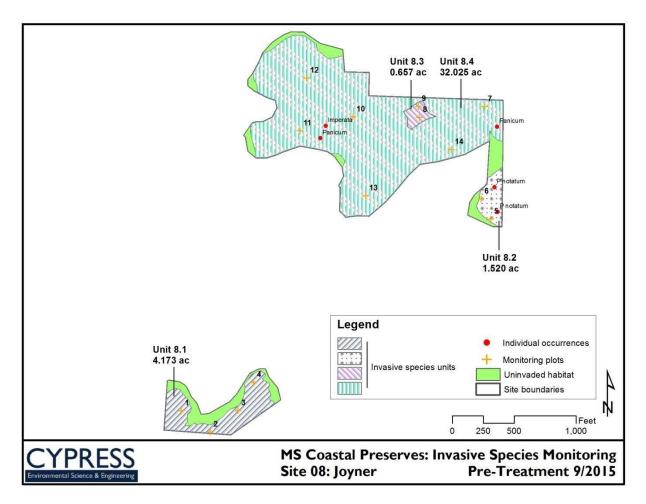
Need to secure permission from landowners.

**Targeted Species:** Chinese tallow (*Triadica sebifera*)

**Site Description:** Pine maritime forest and a scrub/shrub community.

**T&E Species Considerations:** Unknown

Map of Site Location and Invasive Species Units

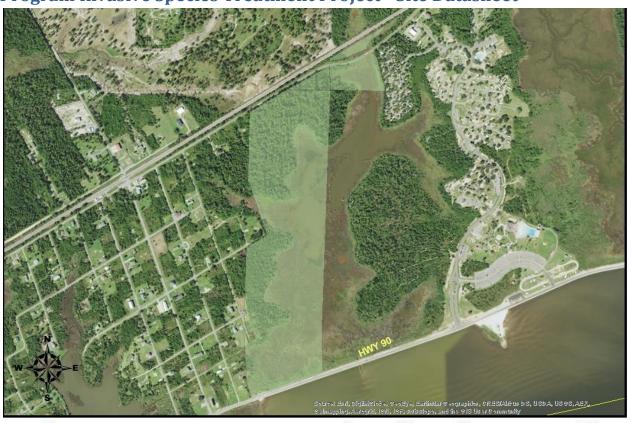


Unit 8.1 – 4.173 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-2011	632	3.5-9	0-1	0-8%	
Triadica sebifera	0-361	103	7-17	1-2	NA	
Triadica sebifera	0-258	129	9-16	2-3	NA	
Triadica sebifera	0-412	142	15-30	3-5	NA	
Triadica sebifera	0-258	65	20-23	5-8	NA	
Triadica sebifera	0-52	13	35	8-12	NA	

Unit 8.2 – 1.520 Acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0	0	NA	0-1	0-<1%
Triadica sebifera	0-258	129	8-17	1-2	NA
Triadica sebifera	103-206	155	12-20	2-3	NA
Triadica sebifera	0	0	NA	3-5	NA
Triadica sebifera	0	0	NA	5-8	NA
Triadica sebifera	0	0	NA	8-12	NA

Unit 8.3 – 0.657 Acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	206-670	438	3.5-9	0-1	<1-1%
Triadica sebifera	0-258	129	9-10	1-2	NA
Triadica sebifera	0	0	NA	2-3	NA
Triadica sebifera	0	0	NA	3-5	NA
Triadica sebifera	0	0	NA	5-8	NA
Triadica sebifera	0	0	NA	8-12	NA

Unit 8.4 – 32.205 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-1340	387	3.5-6	0-1	<1-8%	
Triadica sebifera	0	0	NA	1-2	NA	
Triadica sebifera	0	0	NA	2-3	NA	
Triadica sebifera	0	0	NA	3-5	NA	
Triadica sebifera	0	0	NA	5-8	NA	
Triadica sebifera	0	0	NA	8-12	NA	





# Grand Bayou Coastal Preserve GEX Tract

0 0.125 0.25 0.5 Miles

Legend

GEX

**Site No:** 9 **Site Name:** Grand Bayou Preserve – Gex Tract

**County:** Hancock Lat: 30.2629058 Long: 89.4472032

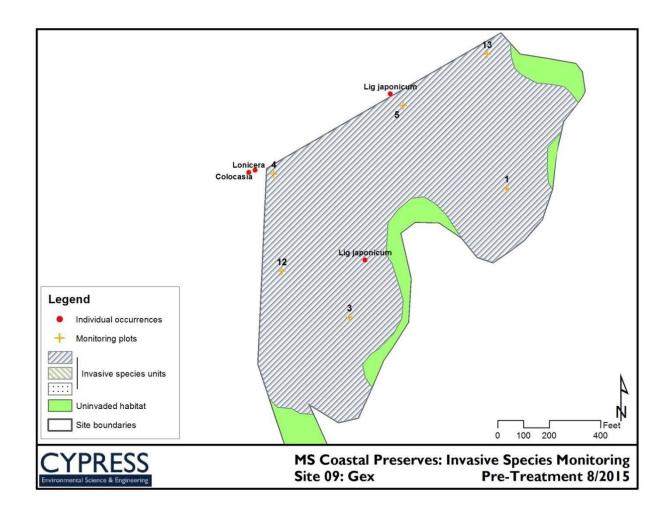
Total Area: 38.8 acres

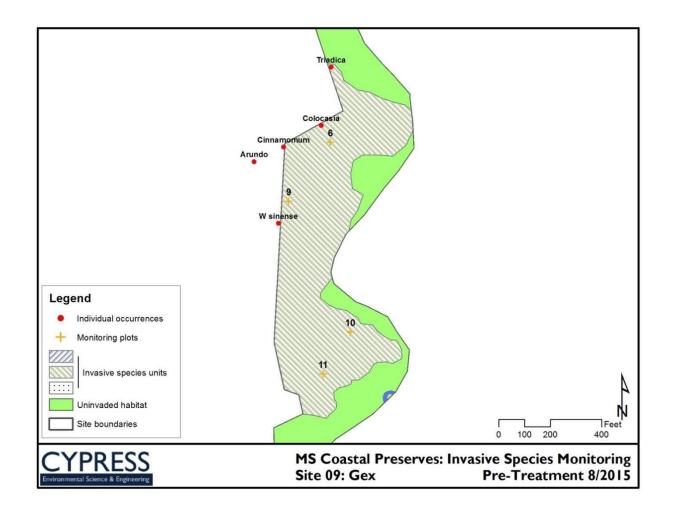
Access Info: Paved road access via N. Railroad Ave. and Beach Blvd.

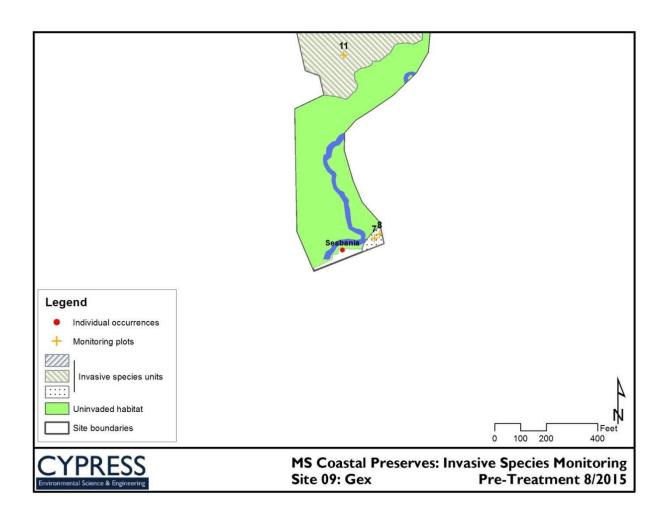
**Targeted Species:** Chinese tallow (*Triadica sebifera*), Camphor tree (*Cinnamomum camphora*) and Common reed (*Phragmites australis*)

**Site Description:** Urban-marsh interface area with maritime forest, residential development on the west and north sides, estuarine marsh to the east and US Highway 90, beach and the Mississippi Sound to the south.

**T&E Species Considerations:** Unknown







#### **Pre-Treatment Survey Results for Targeted Areas:**

Unit 9.1 - 21.187 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	52-2474	541	4-15	0-1	0-3%	
Triadica sebifera	0-670	163	10-20	1-2	NA	
Triadica sebifera	0-361	60	15-25	2-3	NA	
Triadica sebifera	0-206	43	25-30	3-5	NA	
Cinnamomum camphora	0-52	9	8	0-1	0%	

#### Unit 9.2 - 8.327 Acres

Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	258-825	451	4-20	0-2	0-1%
Triadica sebifera	0	0	NA	2-3	NA
Triadica sebifera	0-103	26	22	3-5	NA
Cinnamomum camphora	0-412	206	4-12	0-1	0-2%
Cinnamomum camphora	0-361	180	25	1-2	NA
Cinnamomum camphora	0	0	NA	2-3	NA
Cinnamomum camphora	0-52	26	20	3-5	NA
Cinnamomum camphora	0-52	26	20	5-8	NA
Cinnamomum camphora	0-52	26	30	8-12	NA

Unit 9.3 - 0.095 Acres					
Species	Height (ft)	% Cover Range	Mean % Cover		
Phragmites australis	8	75-100%	88%		



Site No: 10 Site Name: Bayou LaCroix Preserve Admiral Isle Tract

**County:** Hancock Lat: 30.3315264 Long: 89.4182961

Total Area: 351 acres.

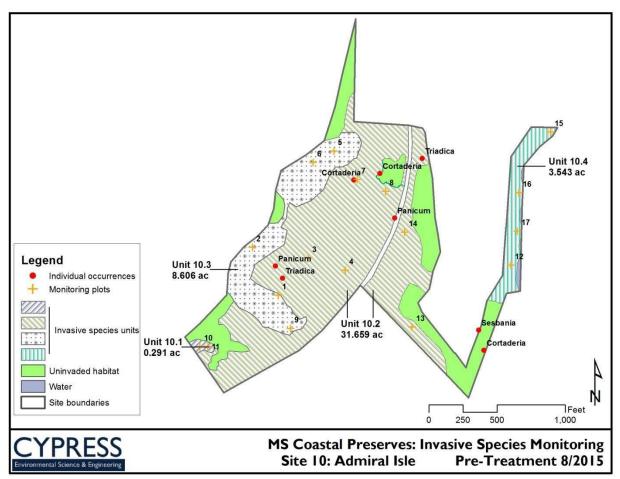
Access Info: Paved access via Sugar Field Road. Most terrain not suitable for machinery. Foot access difficult due to dense vegetation and numerous wet holes in low areas.

**Known Invasives:** Chinese Tallow (*Triadica sebifera*), pampas grass (*Cortaderia sp.*), common reed (*Phragmites australis*), torpedo grass (*Panicum* repens) and rattlebox (*Sesbania punicea*)

**Site Description:** Mixed forest along the western boundary with scrub/shrub habitat and marsh.

**T&E Species Considerations:** Unknown

#### **Map of Site Location and Invasive Species**



Unit 10.1 – 0.291 Acres					
Species	Height (ft)	% Cover Range	Mean % Cover		
Phragmites australis	6-7	60-70%	65%		

Unit 10.2 – 31.659 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	412-6083	1993	6-14	0-1	0-2%	
Triadica sebifera	516-1443	920	9-22	1-2	NA	
Triadica sebifera	52-567	215	12-18	2-3	NA	
Triadica sebifera	0-52	26	12-15	3-5	NA	

Triadica sebifera	0-52	9	25	5-8	NA
Sesbania punicea	0-206	34	6-10	0-1	0%
Sesbania punicea	0-155	26	10-15	1-2	NA

Unit 10.2 - continued			
Species	Height (ft)	% Cover Range	Mean % Cover
Cortaderia selloana	7	0-15%	2.5%

Unit 10.3 – 8.606 acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	206-1701	588	6-15	0-1	0-3%	
Triadica sebifera	103-619	371	8-20	1-2	NA	
Triadica sebifera	52-258	175	13-20	2-3	NA	
Triadica sebifera	0-52	10	18	3-5	NA	

Unit 10.4 – 3.543 acres					
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-309	116	8-25	0-1	0-2%
Triadica sebifera	0	0	-	-	NA
Triadica sebifera	0-52	26	12-16	2-3	NA
Triadica sebifera	0-103	52	12-25	3-5	NA
Sesbania punicea	0	0	-	0-1	0%
Sesbania punicea	0-52	13	12	1-2	NA

Unit 10.4 - continued					
Species	Height (ft)	% Cover Range	Mean % Cover		
Phragmites australis	11-14	0-15%	6.3%		





#### Wolf River Coastal Preserve DeLisle Tract

Legend DeLisle

**Site No:** 11 **Site Name:** Wolf River Coastal Preserve – De'Lisle Tract

**County:** Harrison Lat: 30.3798793 Long: 89.2772570

Total Area: 650 acres

Access Info: Paved access via Kiln-De'Lisle road.

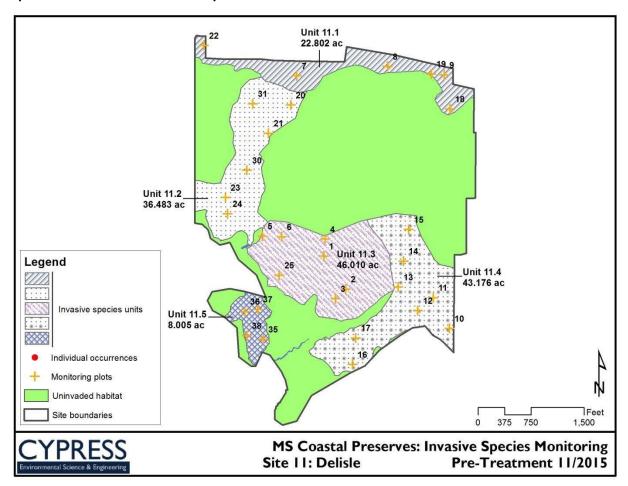
Trails suitable for ATV use. Foot access difficult in areas due to dense vegetation and wet soil conditions.

**Targeted Species:** Chinese tallow (*Triadeca sebifera*), Wild Taro (*Colocascia esculenta*), camphor tree (*Cinnamomum camphor*), Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), Japanese climbing fern (*Lygodium japonicum*), torpedo grass (*Panicum repens*), rattlebox (*Sesbania punicea*), wisteria (*Wisteria sinensis*), Johnson grass (*Sorghum halepense*) and feral hogs (*Sus scrofa*).

**Site Description:** The site grades from forest on the northern side of the site down to estuarine marsh with islands of maritime forest. Forests on the site are mostly bottomlands, with some maritime forest near the boundary with the marsh

**T&E Species Considerations:** Unknown

#### **Map of Site Location and Invasive Species**



Unit 11.1 – 22.802 Ac	es				
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-1237	266	3.5-10	0-1	0-2%
Triadica sebifera	0-516	86	12-20	1-2	NA
Triadica sebifera	0-258	43	20-25	2-3	NA
Triadica sebifera	0-361	60	30-35	3-5	NA
Triadica sebifera	0	0	-	5-8	NA
Triadica sebifera	0	0	-	8-12	NA
Triadica sebifera	0	0	-	>12	NA
Ligustrum sinense	0-1340	524	3.5-7	0-0.5	0-8%

Ligustrum sinense	0-876	335	7-12	0.5-1	NA	Ī
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Unit 11.2 – 36.483 Ac res								
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0-670	146	3.5-10	0-1	0-1%			
Triadica sebifera	0-361	86	12-23	1-2	NA			
Triadica sebifera	0-52	9	25	2-3	NA			
Triadica sebifera	0-52	9	22	3-5	NA			
Triadica sebifera	0-52	9	33	5-8	NA			
Triadica sebifera	0-52	9	45	8-12	NA			
Triadica sebifera	0	0	-	>12	NA			
Ligustrum sinense	0-980	284	3.5-6	0-0.5	0-3%			
Ligustrum sinense	0-361	95	6-12	0.5-1	NA			
Ligustrum sinense	0-103	34	7-12	1-2	NA			

Unit 11.3 – 46.010 Ac res							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-361	133	3.5-10	0-1	0-1%		
Triadica sebifera	0-206	44	9-12	1-2	NA		
Triadica sebifera	0	0	-	2-3	NA		
Triadica sebifera	0-52	7	15	3-5	NA		
Triadica sebifera	0	0	-	5-8	NA		
Triadica sebifera	0	0	-	8-12	NA		
Triadica sebifera	0	0	-	>12	NA		
Ligustrum sinense	0-103	15	7	0-1	0%		

Unit 11.3 – Continued			
Species	Height (ft)	% Cover Range	Mean % Cover
Imperata cylindrica	0-3	0-40%	11%

Unit 11.4 – 43.176 Ac 'es							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-464	149	3.5-12	0-1	0-2%		

Department of Marine Resources RFQ –Invasive Vegetation Control Issued – August 19, 2016

Triadica sebifera	0-258	45	10-15	1-2	NA
Triadica sebifera	0-258	39	16-23	2-3	NA
Triadica sebifera	0-103	19	23-30	3-5	NA
Triadica sebifera	0-52	7	35	5-8	NA
Triadica sebifera	0	0	-	8-12	NA
Triadica sebifera	0	0	-	>12	NA

Unit 11.5 – 8.005 Acr !s								
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0	0	-	0-1	0-2%			
Triadica sebifera	0-52	13	9	1-2	NA			
Triadica sebifera	0	0	-	2-3	NA			
Triadica sebifera	0-52	13	23	3-5	NA			
Triadica sebifera	0	0	-	5-8	NA			
Triadica sebifera	0	0	-	8-12	NA			
Triadica sebifera	0	0	-	>12	NA			



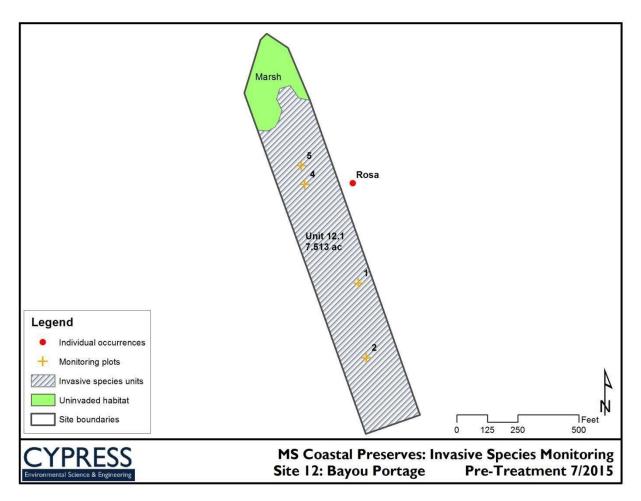


## Bayou Portage Coastal Preserve North StTract

Legend
North\_st

Site No: 12	ite No: 12   Site Name: Bayou Portage Preserve – Hodge Tract				
County: Harr	ison	Lat: 30.3300871	Long: 89.2391480		
Total Area:		Treatment/Monitorin	g Area: 9.2 acres		
Access Info:	Road a	access via E. North St.			
Targeted Spe	scioc: /	Chinese Tallow ( <i>Triadic</i>	ca cabifara)		
Targeted Spe	cies: v	chinese ranow (Thuuit	La sebijeraj		
Habitat Type	s: Ma	ritime pine savannah a	ind marsh		
T&E Species	Consid	derations: Unknown			

### **Map of Site Location and Invasive Species Units**



Unit 5.1 – 7.726 Acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera (Stressed)	0-361	90	4	0-1	0%		
Triadica sebifera	206-876	464	3-12	0-1	NA		
Triadica sebifera	0-516	155	6-18	1-2	0-5%		
Triadica sebifera	52-103	90	10-17	2-3	NA		
Triadica sebifera	0-52	39	18-30	3-5	NA		

Triadica sebifera	0-206	77	22-30	5-8	NA
Triadica sebifera	0-52	13	40	8-12	NA





Wolf River Coastal Preserve Bells Ferry Tract

Legend

Bells\_Ferry

Site No: 13 Site Name: Wolf River Preserve – Bells Ferry

**County:** Harrison Lat: 30.3895660 Long: 89.225999

Total Area: 104.5 acres

Access Info: Road access, parking area, hiking trail.

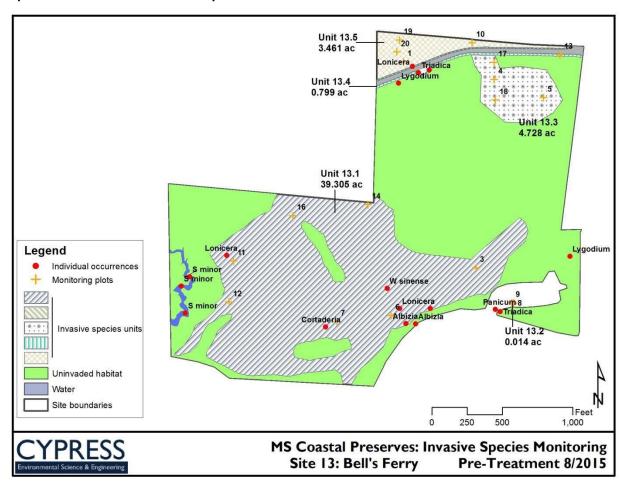
Targeted Species: Chinese tallow (*Triadeca sebifera*), Chinese privet (*Ligustrum sinense*) and rattlebox

(Sesbania punicea)

**Site Description:** Riverine forest complex with various subcommunities based on moisture gradient. Freshwater emergent areas along the southeast and southwest corners of the site.

**T&E Species Considerations:** Unknown

#### **Map of Site Location and Invasive Species**



Unit 13.1 – 39.305 Acres						
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-258	96	5-15	0-1	0-2%	

Department of Marine Resources RFQ –Invasive Vegetation Control Issued – August 19, 2016

Triadica sebifera	0-206	81	10-20	1-2	NA
Triadica sebifera	0-52	7	25	2-3	NA
Triadica sebifera	0-52	7	35	3-5	NA
Triadica sebifera	0-52	15	35-40	5-8	NA
Ligustrum sinense	0-412	59	4-10	0-1	0%
Sesbania punicea	0-52	7	6	0-1	0%
Sesbania punicea	0-103	15	10-12	1-2	NA

Unit 13.3 – 4.728 Acres								
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0-103	26	8-12	0-1	0-<1%			
Triadica sebifera	0	0	-	1-2	NA			
Triadica sebifera	0-258	116	22-30	2-3	NA			
Triadica sebifera	0-258	90	22-38	3-5	NA			

Unit 13.5 – 3.461 Acres								
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0-103	39	2-4	0-1	0-<1%			
Triadica sebifera	0	0	-	1-2	NA			
Triadica sebifera	0	0	-	2-3	NA			
Triadica sebifera	0-103	26	18-25	3-5	NA			
Ligustrum sinense	0-52	13	3	0-1	0-2%			
Ligustrum sinense	0-258	64	5-13	1-2	NA			





#### International Paper Coastal Preserve

Legend IP\_tracts

Site No: 14Site Name: International Paper – Biloxi RiverCounty: HarrisonLat: 30.4510627Long: 89.0079584

**Total Area:** 68.0 **Treatment/Monitoring Area:** about 40 acres

Access Info: Boat access via Popps Ferry Launch (6.5 miles downriver)

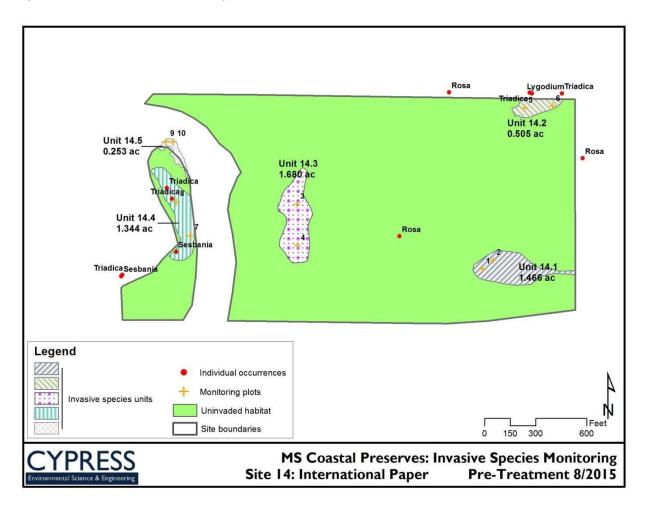
**Targeted Species:** Chinese Tallow (*Triadica sebifera*), Chinese privet (*Ligustrum sinense*)

**Site Description:** The site is composed of three habitats: mixed forest, sawgrass marsh, and sand bar. The eastern side of the property has a mixed forest dominated by pines. The western portion of the property is a sawgrass marsh bounded by a narrow band of forest on the edge of the Biloxi River.

**T&E Species Considerations:** Unknown

Summary of Control Efforts to Date: No previous known control efforts

#### **Map of Site Location and Invasive Species**



Unit 14.1 – 1.468 Acres									
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings				
Triadica sebifera	258-516	387	5-20	0-1	<1-3%				
Triadica sebifera	361-412	387	18-20	1-2	NA				
Triadica sebifera	0-52	26	25	2-3	NA				
Triadica sebifera	52-103	77	27-32	3-5	NA				
Triadica sebifera	0-52	26	35	5-8	NA				
Ligustrum sinense	1598-3557	2578	4-15	0-1	4-5%				

Ligustrum sinense	0-464	232	10-15	1-2	NA
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Unit 14.2 – 1.680 acres							
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-309	155	4-15	0-1	0-<1%		
Triadica sebifera	0-52	26	8-8	0-1	0-2%		

Unit 14.3 – 8.606 acres								
Species	Density Range (#/acre)	Mean (#/acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0-309	155	6-7	0-1	0-<1%			
Triadica sebifera	0-258	129	6-9	1-2	NA			



Site No: 15 | Site Name: Biloxi River Preserves – Krohn Tract

**County:** Harrison Lat: 30.4540332 Long: 88.9457410

Total Area: 33.1 acres

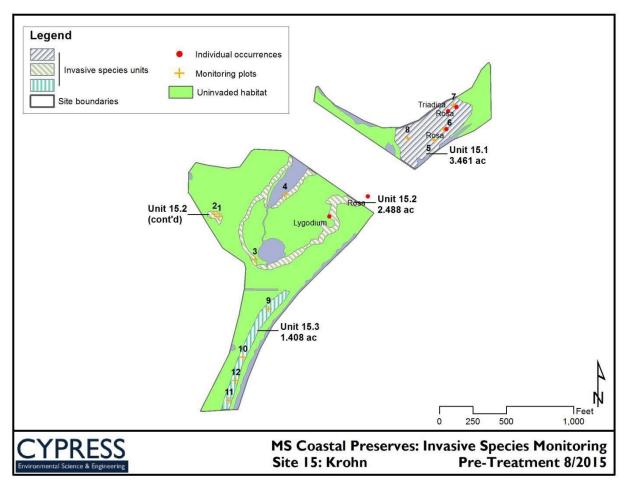
Access Info: Access via Tchoutacabouffa River via Popp's Ferry launch (5.6 miles)

**Targeted Species:** 

**Site Description:** Riverine forest community on the river berm and partially surrounding the ponds and an estuarine marsh community.

**T&E Species Considerations:** Unknown

#### **Location and Invasive Species**



Unit 15.1 – 3.461 Acr	!S				
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera		Individual trees	as depicted on a	bove map	

Unit 15.3 – 1.408 Acr :s							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-567	206	5-10	0-1	0-3%		
Triadica sebifera	0-52	13	13	1-2	NA		
Triadica sebifera	0	0	-	2-3	NA		
Triadica sebifera	0-156	39	15-26	3-5	NA		

Triadica sebifera	0-52	26	25-26	5-8	NA	1
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#### Biloxi River Coastal Preserve Lakeview Tract

Legend Lakeview

Site No: 16 Site Name: Biloxi River Preserve - Lakeview

**County:** Harrison Lat: 30.460392 Long: 88.8992254

Total Area: 5 acres

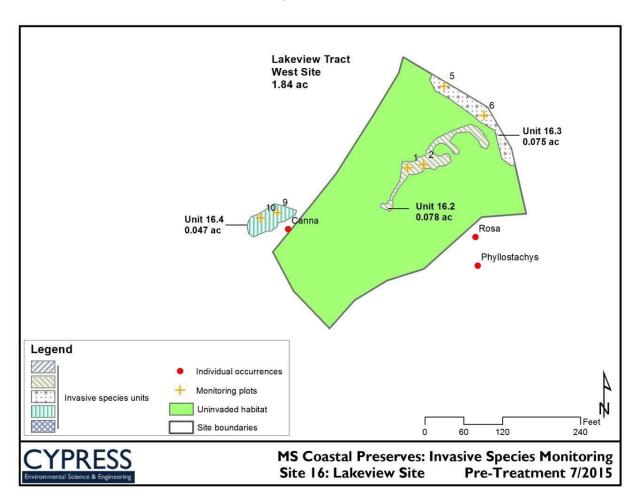
**Access Info:** Paved access via Lamey Bridge Road. Water access via Tchoutacabouffa River. Public access (has launch fee) 0.6 miles downstream.

**Known Invasive(s):** Chinese tallow (*Triadeca sebifera*), Chinese privet (*Ligustrum sinense*).

**Site Description:** Both sites both contain a riverine forest with wetland and non-wetland components. In addition, the western site contains emergent wetland flats and a cutover portion of riverine forest that falls within a utility right-of-way. Treatment requested only in a portion of the western section.

**T&E Species Considerations:** Unknown

#### - Western Location and Invasive Species



Unit 16.3 – 0.075 Acr	s				
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-1214	607	15-30	2-3	1-5%
Triadica sebifera	0	0	-	3-5	NA
Triadica sebifera	0-405	203	35	5-8	0%
Ligustrum sinense	0-2428	1214	4-7	0-0.5	0%
Ligustrum sinense	0	0	-	0.5-1	0-8%
Ligustrum sinense	0-2023	1021	6-12	1-2	NA



THE PROPERTY CONSIDER

#### **Deer Island Coastal Preserve**

0 0.425 0.85 1.7 Miles

Legend

Deer\_parcels

Site No: 17 Site Name: Deer Island Coastal Preserve

**County:** Harrison Lat: 30.3828016 Long: 88.8645764

Total Area: 746 acres.

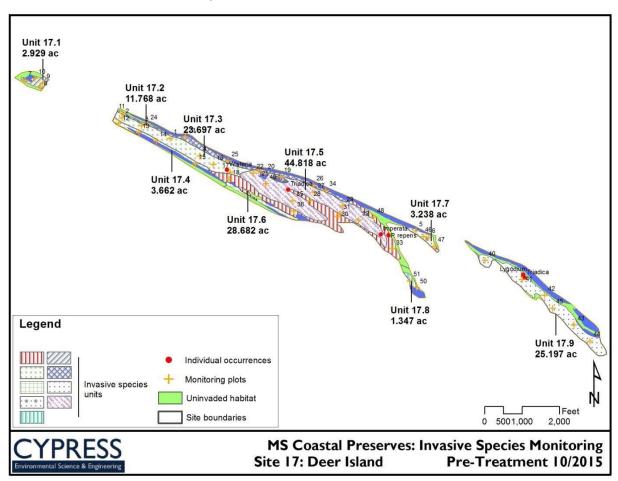
Access Info: Boat access only. Nearest launches - Kuhn Street Launch or Biloxi Small Craft Harbor (<1 mils from North side of island). Trails suitable for small ATV.

**Targeted Species:** Chinese Tallow (*Triadica sebifera*), Phragmities (*Phragmities australis*) and rattlebox (*Sesbania punicea*).

**Site Description:** Habitats on this site include high marsh, scrub, vegetated beach/dune, and maritime pine forest.

**T&E Species Considerations:** Bald eagle nest on site

#### **Location and Invasive Species**



Unit 17.1 – 2.929 Acres			
Species	Height (ft)	% Cover Range	Mean % Cover
Phragmites australis	7-8	0-20%	5%

Unit 17.2 – 11.768 Acr	es				
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Sesbania punicea	0-103	11	8-10	1-2	0%

Unit 17.3 – 23.697 Ac res								
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings			
Triadica sebifera	0-52	9	5	0-1	0%			
Triadica sebifera	0	0	0	1-2	NA			
Triadica sebifera	0	0	0	2-3	NA			
Triadica sebifera	0	0	0	3-5	NA			
Triadica sebifera	0	0	0	5-8	NA			

Unit 17.5 – 44.818 Ac res						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-155	44	4.5-9	0-1	0%	
Triadica sebifera	0	0	-	1-2	NA	
Triadica sebifera	0-52	7	12	2-3	NA	
Triadica sebifera	0-52	7	8	3-5	NA	
Triadica sebifera	0	0	0	5-8	NA	

Unit 17.6 – 26.682 Acres						
Species	Height (ft)	% Cover Range	Mean % Cover			
Phragmites australis	8-15	0-80%	14%			

Unit 17.7 – 3.238 Acres			
Species	Height (ft)	% Cover Range	Mean % Cover
Phragmites australis	6-7	0-25%	6%

Unit 17.8 – 1.347 Acres			
Species	Height (ft)	% Cover Range	Mean % Cover
Phragmites australis	8-12	0-40%	20%





#### Davis Bayou Coastal Preserve Hellmer's Lane Tract

Legend
Hellmers

**Site No:** 18 | **Site Name:** Hellmer's Lane

**County:** Jackson Lat: 30.4077448 Long: 88.8252146

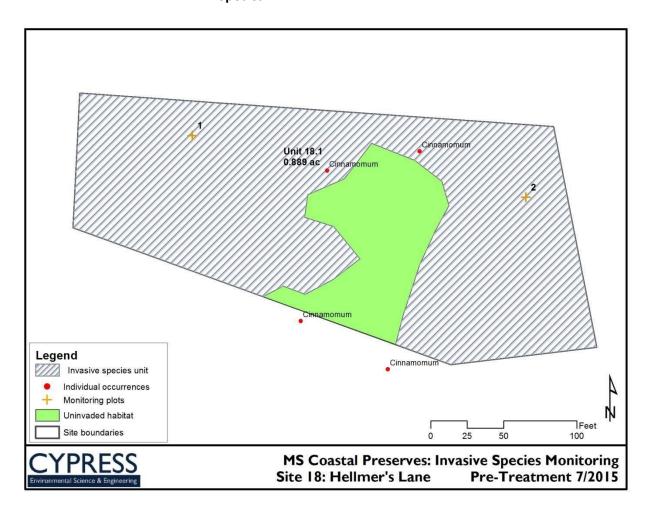
Total Area: 1 acre

Access Info: Road access via Hellmer's Lane

**Targeted Species:** Chinese tallow (*Triadeca sebifera*), Chinese privet (*Ligustrum sinense*).

**Site Description:** Bottomland forest with a tidal creek (approximately 2 meters wide and 0.2 meters deep) and 2 intermittent tributaries to the creek that flow through the site.

**Species** 



Unit 18.1 – 22.802 Acres						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-52	26	35	3-5	0%	
Triadica sebifera	0-52	26	40	>12	NA	
Ligustrum sinense	1289-1804	1547	3-7	0-0.5	4-7%	
Ligustrum sinense	722	722	5-25	0.5-2	NA	
Ligustrum sinense	0-309	155	8-25	2-4	NA	





### Old Fort Bayou Coastal Preserve Lemon Tract

Legend

Lemon

**Site No:** 19 **Site Name:** Old Fort Bayou Preserves - Lemon

**County:** Jackson Lat: 30.4279492 Long: 88.8172616

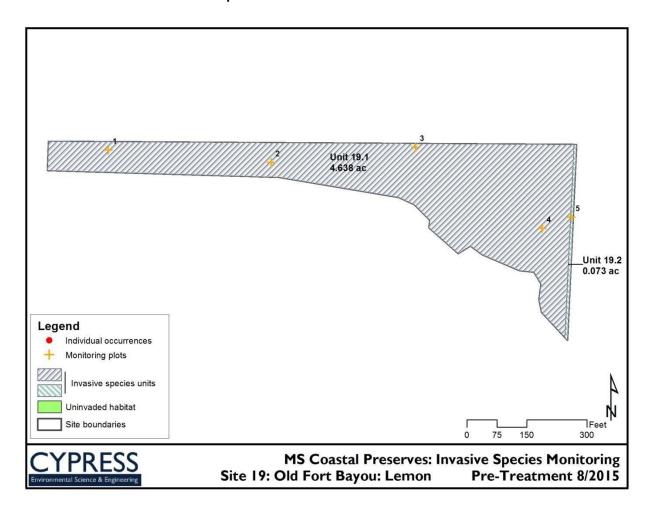
Total Area: 4.8 acres

Access Info: Boat access via Old Fort Bayou (1.2 miles from Old Fort Bayou Launch).

**Targeted Species:** Chinese tallow (*Triadeca sebifera*), Japanese privet (*Ligustrum japonica*)

**Site Description:** Nonwetland pine forest on a spoil berm with estuarine marsh adjacent to the south of the site and open canals to the east and north.

**Species** 



Unit 19.1 – 4.638 Acres						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-155	52	5-7	0-1	0-<1%	
Triadica sebifera	0-103	39	12-15	1-2	NA	
Triadica sebifera	0-52	13	15	2-3	NA	
Triadica sebifera	0-52	13	25	3-5	NA	
Ligustrum japonicum	0-258	64	10-12	0-1	-	





### Old Fort Bayou Coastal Preserve Twelve Oaks Tract

Legend

12oaks

**Site No:** 20 | **Site Name:** Old Fort Bayou Preserve – Twelve Oaks

**County:** Jackson Lat: 30.4170455 Long: 88.7963554

Total Area: 18.1 acres

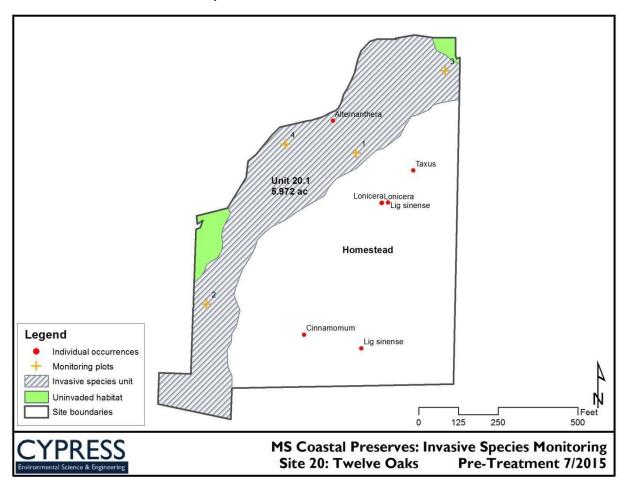
Access Info: Road access via Hwy 90

**Targeted Species:** Chinese tallow (*Triadeca sebifera*), Chinese privet (*Ligustrum sinense*), Japanese privet (*Ligustrum inponicum*)

privet (Ligustrum japonicum),

**Site Description:** Natural areas contain a mixed upland forest grading into marsh along the north boundary with some estuarine marsh and small waterways on the site boundaries.

**Species** 



Unit 20.1 – 5.972 Acres					
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-103	26	30	5-8	0%
Ligustrum japonicum	0-52	13	3	0.5-1	0%
Ligustrum sinense	Single occurrence – please see above map for locati in				





#### Davis Bayou Coastal Preserve Watson Tract

0 0.045 0.09 0.18 Miles

Legend

Watson

**Site No:** 21 | **Site Name:** Davis Bayou Preserve - Watson

**County:** Jackson Lat: 30.3822131 Long: 88.7605008

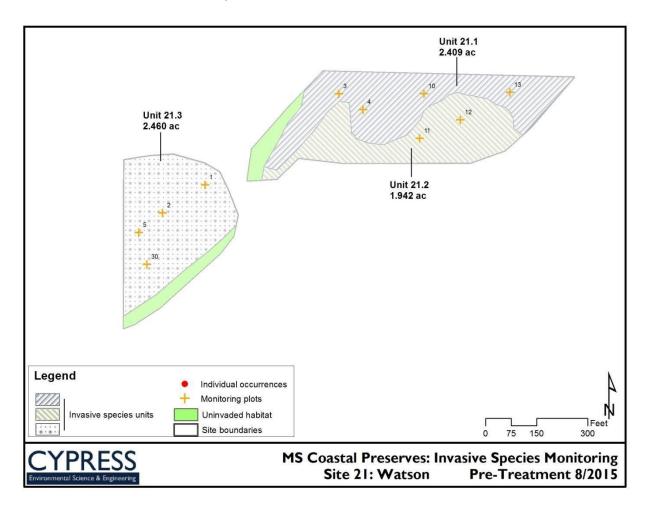
Total Area: 7.4 acres

Access Info: Shallow water access via Simmons Bayou

**Targeted Species:** Chinese tallow (*Triadeca sebifera*), Chinese privet (*Ligustrum sinense*)

Site Description: Mixed forest with mixed marsh /shrub community

**T&E Species Considerations:** Unknown



Unit 21.1 – 2.409 Acr !s						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	103-361	180	5-12	0-1	1-15%	
Triadica sebifera	0-206	103	12-20	1-2	NA	
Triadica sebifera	0-52	26	20-35	2-3	NA	
Triadica sebifera	0-52	39	12-30	3-5	NA	
Triadica sebifera	0-103	26	45-45	5-8	NA	
Triadica sebifera	0-52	13	45	8-12	NA	
Triadica sebifera	0-52	13	65	12+	NA	

Unit 21.2 – 36.483 Ac 'es					
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0	0	-	-	2-3%

Unit 21.3 – 2.460 Acr :s					
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-155	90	4-8	0-1	<1-1%
Triadica sebifera	0-103	39	12-30	1-2	NA





#### Graveline Coastal Preserve Luke Tract

0 0.125 0.25 0.5 Mil

Site No: 22 Site Name: Graveline Bay Preserve – Luke Tract

**County:** Jackson Lat: 30.3703881 Long: 88.7180904

Total Area: 47.3 acres

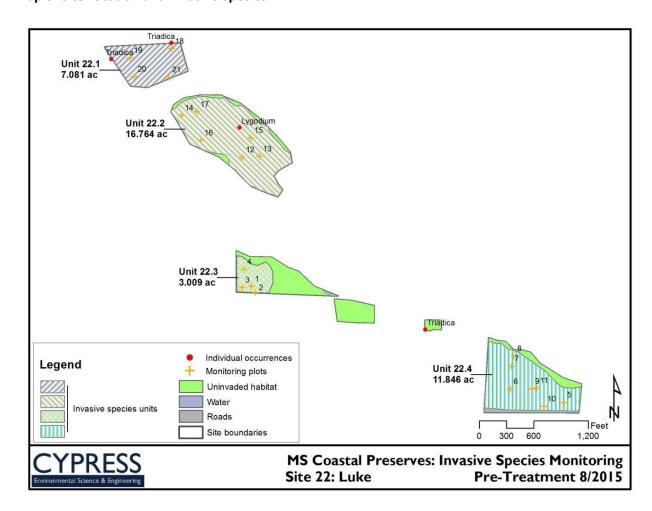
Access Info: Road access available to Southern tracts. Shallow water access to Northern two tracts.

**Targeted Species:** Chinese tallow (*Triadeca sebifera*)

**Site Description:** Six noncontiguous sites of mixed forest and marsh

**T&E Species Considerations:** Unknown

#### **Map of Site Location and Invasive Species**



The meaninement survey	The freeding to the feet of th						
Unit 22.1 – 7.081 Acr	!S						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-52	26	6-7	0-1	<1-2%		
Triadica sebifera	0-103	26	6-13	1-2	NA		
Triadica sebifera	0-103	26	16-20	2-3	NA		

Unit 22.2 – 16.764 Ac res							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-2423	1005	3-12	0-1	<1-30%		
Triadica sebifera	0-155	52	12-15	1-2	NA		
Triadica sebifera	0-206	34	21-25	2-3	NA		
Triadica sebifera	0-52	26	25-30	3-5	NA		
Triadica sebifera	0-52	9	33	5-8	NA		

Unit 22.3 – 3.009 Acr :s							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-103	39	5-7	0-1	0-1%		
Triadica sebifera	0-52	26	12-18	1-2	NA		
Triadica sebifera	0-155	39	30-32	2-3	NA		
Triadica sebifera	0-103	26	30-40	3-5	NA		

Unit 22.4 – 11.846 Ac res							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-206	96	4-14	0-1	0-1%		
Triadica sebifera	0-567	81	14-25	1-2	NA		
Triadica sebifera	0-155	29	30-35	2-3	NA		
Triadica sebifera	0-52	7	30	3-5	NA		

## Mississippi Department of Marine Resources - Coastal Preserves Program Invasive Species Treatment Project - Site Datasheet





## Pascagoula River Coastal Preserve - Indian Point Tract

Indian Poin

Legend

Site No: 23 | Site Name: Pascagoula River Coastal Preserve – Indian Point Tract

**County:** Jackson Lat: 30.4067580 Long: 88.640977

Total Area: 458 acres.

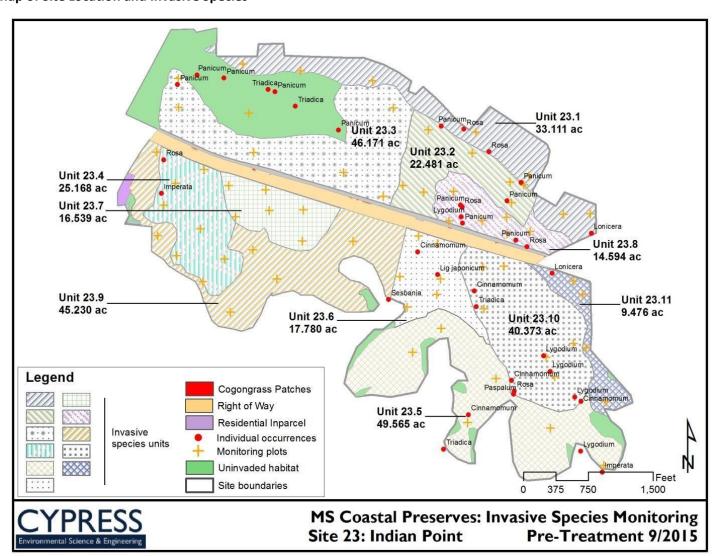
**Access Info:** Paved road access via Indian Point Drive. Trails accessible by small ATV. Foot access off trails difficult in places due to dense understory vegetation.

**Targeted Species:** Cogongrass (*Imperata cylindrica*), Chinese Tallow Tree (*Triadica sebifera*), Chinese Privet (*Ligustrum sinense*), Japanese Privet (*Ligustrum japonicum*),

**Site Description:** The site is mostly forested, with borders grading into estuarine marsh along much of the southern perimeter and some areas of partially restored pine savanna. Residential development is present on all of the northern and some of the western and eastern boundaries. A road bisects the site, separating it into northern and southern components.

**T&E Species Considerations:** Unknown

### **Map of Site Location and Invasive Species**



#### **Pre-Treatment Survey Results for Targeted Areas:**

Unit 23.1 - 33.111 Acres

Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-361	64	5-12	0-1	0-4%
Triadica sebifera	0-206	45	10-13	1-2	NA
Triadica sebifera	0-52	6	20	2-3	NA
Triadica sebifera	0-103	13	20	3-5	NA
Triadica sebifera	0	0	-	5-8	NA
Triadica sebifera	0	0	-	8-12	NA
Triadica sebifera	0-52	6	45	<12	NA
Ligustrum sinense	0-1701	406	5-14	0-1	0-8%
Ligustrum sinense	0-309	64	8-12	1-2	NA
Ligustrum japonicum	0-52	7	5	0-1	0%
Ligustrum japonicum	0-52	7	12	1-2	NA

Unit 23.2 – 33.111 Acres							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-1031	353	3-10	0-1	0-3%		
Triadica sebifera	0-258	69	7-16	1-2	NA		
Triadica sebifera	0-155	43	10-18	2-3	NA		
Triadica sebifera	0-52	9	20	3-5	NA		
Triadica sebifera	0-52	9	25	5-8	NA		
Ligustrum sinense	0-361	60	10-12	0-1	0%		

Unit 23.2 – Continued							
Species	Height (ft)	% Cover Range	Mean % Cover				
Imperata cylindrica	2	0-30%	5%				

Unit 23.3 – 46.171 Acres						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-361	103	2-9	0-1	0-<1%	
Triadica sebifera	0-52	9	8	1-2	NA	

Triadica sebifera	0-103	17	8-12	2-3	NA
Triadica sebifera	0-52	9	30	3-5	NA

Unit 23.4 – 25.168 Acres						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-206	111	3-7	0-1	0-1%	
Triadica sebifera	0-52	7	10	1-2	NA	

Unit 23.5 – 49.565 Acres							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0	0	NA	0-1	0-1%		
Triadica sebifera	0-206	52	6-18	1-2	NA		
Triadica sebifera	0-206	52	15-20	2-3	NA		
Triadica sebifera	0-206	52	17-25	3-5	NA		
Triadica sebifera	0-103	43	25-40	5-8	NA		

Unit 23.6 – 17.780 Acres							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-1340	232	4-12	0-1	0-1%		
Triadica sebifera	0-155	35	15-18	1-2	NA		
Triadica sebifera	0-52	9	25	2-3	NA		
Triadica sebifera	0	0	NA	3-5	NA		
Triadica sebifera	0	0	NA	5-8	NA		
Triadica sebifera	0-52	9	45	8-12	NA		
Ligustrum sinense	0-258	43	3-4	0-1	0-1%		

Unit 23.7 – 16.539 Acres

Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-412	95	3-9	0-1	0-1%
Triadica sebifera	0-103	17	10-13	1-2	NA

Unit 23.8 – 14.594 Acres						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-155	52	3-8	0-1	0-2%	
Triadica sebifera	0	0	NA	1-2	NA	
Triadica sebifera	0	0	NA	2-3	NA	
Triadica sebifera	0-52	9	30	3-5	NA	
Ligustrum sinense	0-1237	206	5-8	0-1	0%	

Unit 23.9 – 45.230 Acres						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Triadica sebifera	0-155	35	5-7	0-1	0-<1%	
Triadica sebifera	0-103	35	12-18	1-2	NA	
Triadica sebifera	0-52	9	30-32	2-3	NA	

Unit 23.10 – 40.373 Ac	res				
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-619	163	4-12	0-1	0-1%
Triadica sebifera	0-52	9	13	1-2	NA
Triadica sebifera	0-103	26	8-25	2-3	NA
Triadica sebifera	0-103	17	22-25	3-5	NA
Triadica sebifera	0-52	9	28	5-8	NA
Unit 23.11 – 9.476 Acre	<b>es</b>				
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings
Triadica sebifera	0-670	168	3-6	0-1	0-3%

Triadica sebifera	0-52	13	8	1-2	NA
Triadica sebifera	0-52	26	15-30	2-3	NA
Ligustrum sinense	0	0	-	-	0-<1%





## Pascagoula Coastal Preserve Turner Tract

Legend

Turner\_jack

Site No: 24 | Site Name: Pascagoula River Preserve - Turner

**County:** Jackson Lat: 30.4367567 Long: 88.5575526

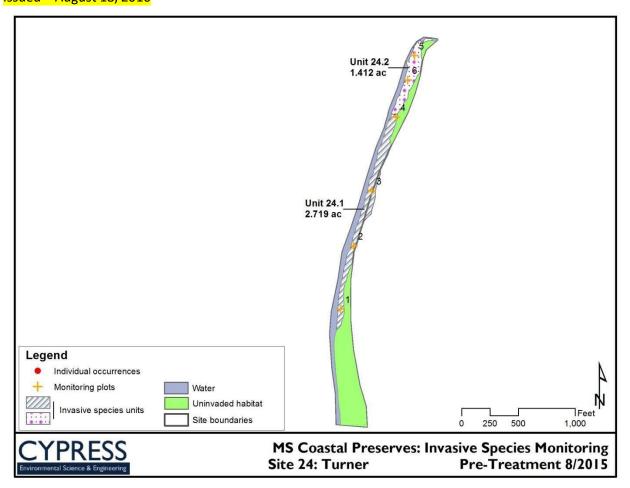
Total Area: 11.8 acres

Access Info: Boat access via I-10 launch, Pascagoula River (< .1 mile)

Targeted Species: Rattlebox (Sesbania punicea)

**Site Description:** River berm scrub/shrub community with a patchy shrub layer and a sparse overstory grading into marsh on the east side.

**T&E Species Considerations:** Unknown



## **Pre-Treatment Survey Results for Targeted Areas:**

Unit 24.1 – 2.719 Acr :s						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Sesbania punicea	0-52	13	6	0-1	0%	
Sesbania punicea	0-52	39	4-12	1-2	NA	

Unit 24.2 – 1.412 Acr :s						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Sesbania punicea	0-1031	516	6-7	0-1	0%	
Sesbania punicea	0-206	103	7-8	1-2	NA	

# Department of Marine Resources RFQ –Invasive Vegetation Control

Issued – August 18, 2016



Site No: 25 | Site Name: Grand Bay Preserve - Estabrook

**County:** Jackson Lat: 30.3803507 Long: 88.5575526

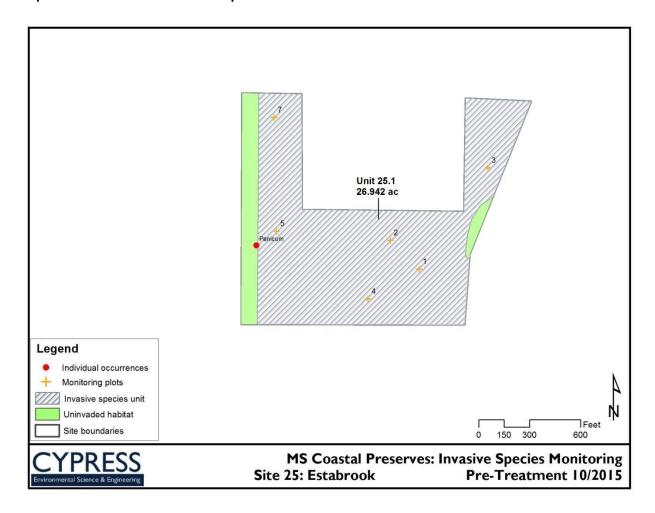
Total Area: 30.4 acres

**Access Info:** Access via pipeline corridor and/or trail from sewage treatment plant.

Targeted Species: Unknown

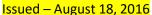
**Site Description:** Maritime pine forest with a mowed right of way

## **Map of Site Location and Invasive Species**



### **Pre-Treatment Survey Results for Targeted Area:**

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Unit 25.1 – 26.942 Ac res							
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings		
Triadica sebifera	0-1804	601	3.5-15	0-1	<1-1%		
Triadica sebifera	0-1547	387	8-15	1-2	NA		
Triadica sebifera	0-258	86	14-25	2-3	NA		
Triadica sebifera	0-619	129	18-30	3-5	NA		
Triadica sebifera	0-155	26	30-35	5-8	NA		







# Grand Bay Coastal Preserve Savannah Tract

0 0.04 0.08 0.16 Miles

Legend

Savannah

**Site No:** 26 **Site Name:** Grand Bay Preserve - Savannah

**County:** Jackson Lat: 30.4507461 Long: 88.4186530

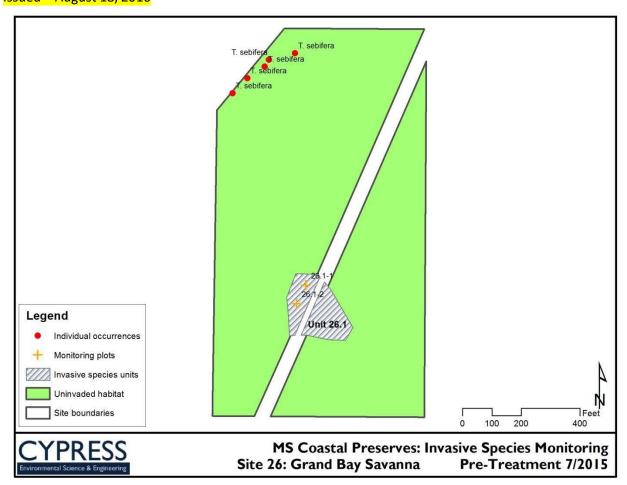
Total Area: 18.76 acres

Access Info: Paved access via Franklin Creek Road and Hwy 90.

Targeted Species: Chinese tallow (*Triadeca sebifera*), Chinese privet (*Ligustrum sinense*).

**Site Description:** Pine savanna transitioning into cypress/pine savanna in wetter areas.

**T&E Species Considerations:** Unknown



## **Pre-Treatment Survey Results for Targeted Areas:**

Unit 26.1 – 0.734 Acres						
Species	Density Range (#/acre)	Mean (# / acre)	Height Range (feet)	DBH Range (inches)	% Cover Range of Seedlings	
Ligustrum japonicum	0-52	26	5	<0.5	-	
Triadica sebifera	0-52	26	6.5	0-1	0-4%	
Triadica sebifera	0-103	52	12	1-2	NA	
Triadica sebifera	103-155	129	9-18	2-3	NA	
Triadica sebifera	0-155	78	15-25	3-5	NA	
Triadica sebifera	In lividual trees of unknown size as depicted on mar					